

COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

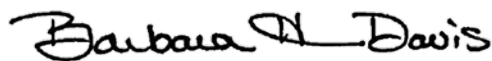
WHITE TOWNSHIP
WARREN COUNTY

NOVEMBER 2021



COMPREHENSIVE FARMLAND
PRESERVATION PLAN UPDATE
for
Township of White
County of Warren

Prepared November 2, 2021 by:
The Land Conservancy of New Jersey
An accredited land trust
19 Boonton Avenue
Boonton, NJ 07005



Barbara Heskins Davis, PP, AICP
NJ Professional Planner (License No.: 5926)

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COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

for

Township of White County of Warren

Produced by:

The Land Conservancy of New Jersey

David Epstein, President

Barbara Heskins Davis, PP, AICP, Vice President, Programs

Kenneth Fung, Senior GIS Manager

Planning Interns:

Rebecca Bright, Hiyabu Habtemichael, Rachel Hammelman,

Mihir Rastogi, Christopher Sudol, Ethan Wissler, Hope Wright

For further information, please contact:



19 BOONTON AVENUE
BOONTON, NJ 07005
PH: (973)541-1010
TLC-NJ.ORG



Township of White
555 CR 519
Belvidere, NJ 07823
PH: (908) 475-2093
White-township.com

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Township Committee

Mayor Jeff Herb
Chanda Collom, Deputy Mayor
Anne Marie Skoog

Farmland Preservation and Open Space Committee

Agricultural Advisory Committee

Jason Menegus, Chair (Farmland Preservation/Open Space Committee)
Bob Mackey, Chair Agricultural Advisory Committee
Nancy Bilyk
Beth Kabert
Nevitt Duveneck
Arnold Hyndman

Township Staff and Professionals

Kathleen Reinalda, Chief Financial Officer/Township Clerk

Warren County

Corey Tierney, Administrator, Department of Land Preservation

State of New Jersey

Steven Bruder, Planning Manager, State Agriculture Development Committee

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Cover Photograph: Stoneyfield Orchard

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- Chapter 3. Hummer Farm
- Chapter 4. Hensler Farm and Market
- Chapter 5. Chamberlain Farm
- Chapter 6. Hensler Farm and Market
- Chapter 7. Upper Sarepta Road
- Chapter 8. Wycoff Farm



Executive Summary

As of July 2021, **32 farms**, totaling **1,900 acres**, have been preserved in White Township. White has contributed \$713,437, or 6% of the total cost share, to preserve these farms. Since the completion of the *2010 Comprehensive Farmland Preservation Plan*, **21 farms** have been preserved, totaling **1,146** additional acres of farmland.

White Township has **8,285 acres of farm assessed land** devoted to agricultural or horticultural use, with **4,374 acres designated active agriculture** (cropland and pasture). Based upon the State’s Minimum Eligibility Criteria for productive soils and tillable land, the Township has **3,636 acres** that are potentially eligible for preservation. The Township has identified the following farmland preservation goals, depending on available funding and landowner interest:

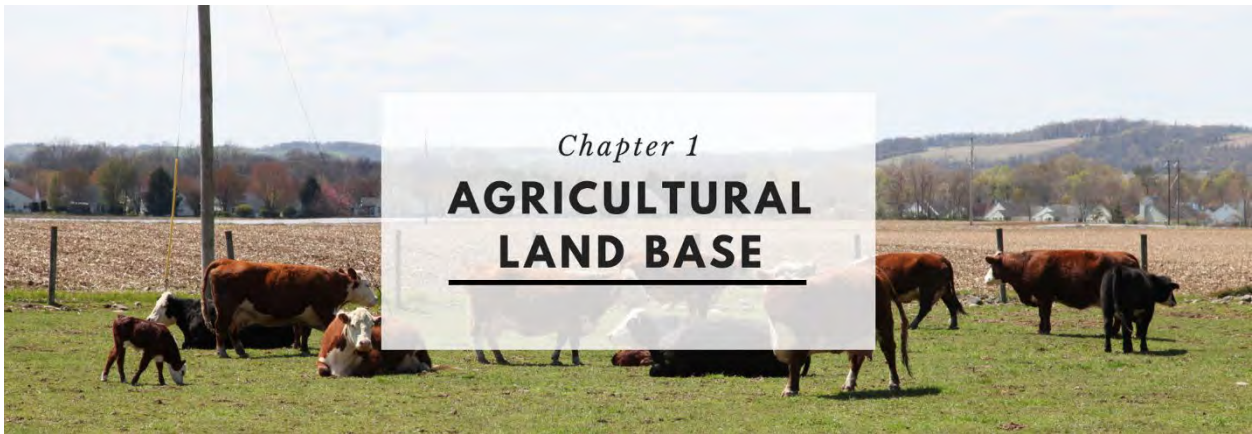
- One-year target: 100 acres, 1 farm
- Five-year target: 900 acres, 9 farms
- Ten-year target: 2,000 acres, 15 farms

Public Meetings

Two public meetings were held on the *Comprehensive Farmland Preservation Plan Update* to share the draft *Update* with residents. The first public meeting was on September 9, 2020, as part of the regularly scheduled meeting of the Township Committee. The second public meeting was hosted by the Planning Board on October 12, 2021, to review the final draft of the *Plan Update* prior to approving the *Update* as an Element of the Master Plan. The public meetings were announced on the municipal website. Meeting materials are included in **Appendix A**.

MISSION STATEMENT

The mission of the Agricultural Advisory Committee is to ensure the viability and sustainability of the agricultural economy and industry in White Township. Located within easy reach of consumer markets in Pennsylvania and New York, the municipality seeks to permanently preserve agricultural lands to protect the livelihoods of the town’s many farmers. Protecting the agricultural lands and its supporting infrastructure will ensure the town’s rural landscape remains secure.



Chapter 1. Agricultural Land Base

Note about the data used in the Comprehensive Farmland Preservation Plan Update:

Chapters 1, 2 and 3 use the Farmland Tax Assessment Dataset, provided by the State Agriculture Development Committee for 2017 and 2019. This is used in conjunction with the Census of Agriculture to provide summary information on the business of agriculture for the municipality and county.

Chapters 4 and 5 of the Plan Update rely on the digital mapping acreage, derived from the GIS (Geographic Information Systems) software used to create the maps in the Plan Update. The GIS is the basis by which potentially eligible farms (“targeted farms”) are identified and there may be slight discrepancies in acreage numbers from those provided in the Farmland Tax Assessment Data.

A. Agricultural Landscape

The Township of White has 8,285 acres of farm assessed land devoted to agricultural or horticultural use, including cropland, pasture, woodland, and equine operations in 2019.^a(**Map 1**). Preserved and public lands in White Township are shown on **Map 2**.

Due to the nature of the topography, 47% of White’s farm-assessed acreage is woodland/wetland (3,907 acres); with 4,374 acres designated active agriculture (cropland and pasture), and 4 acres designated as equine.¹ (**Figure 1**)

White Township lies within the Reading Prong of the Highlands, which runs in a northeast to southwest direction, comprising the southern and eastern portions of the Township and includes Scotts, Montana, and Jenny Jump Mountains. These ridge areas contain several farms, but because of the less productive soils in these higher elevations, farms are not as numerous as in the valley areas.

^a Farm assessed acreage from the 2019 and 2017 Tax Assessment Dataset.

The Ridge and Valley Province in White Township contains a series of northeast-to-southwest running sandstone ridgelines with limestone valleys in between them. This landscape is evident in the central, northern, and western portions of the town, known as the Pophandusing and Pequest Valley regions. These valley regions contain some of the best agricultural soil, and support many of the farms and field crops.²

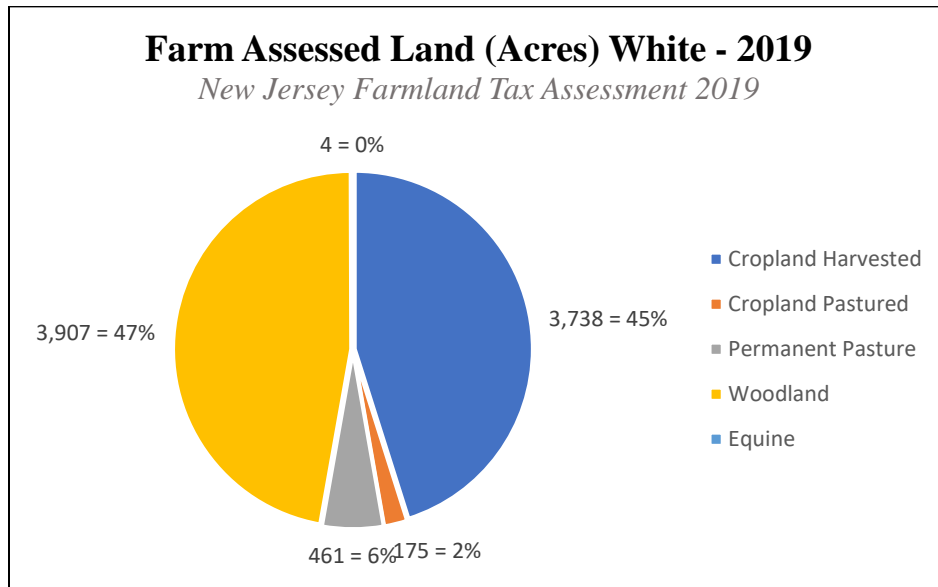


Figure 1. Farm Assessed Land in White (2019 Tax Assessment)

According to 2015 Land Use/Land Cover (LU/LC) data from the New Jersey Department of Environmental Protection (NJDEP), 29% (5,157 acres) of the Township is dedicated to land in agricultural use, slightly higher than 23% county wide.

Almost half (46%) of the town’s land is identified as forest. White has a lower percentage of urban land (14%) than the county wide figure of 18%. **(Figure 2)**

Overall, White has less of its land used for agriculture, when compared to Warren County, due to the rocky soils and steep slopes. **(Table 1)**

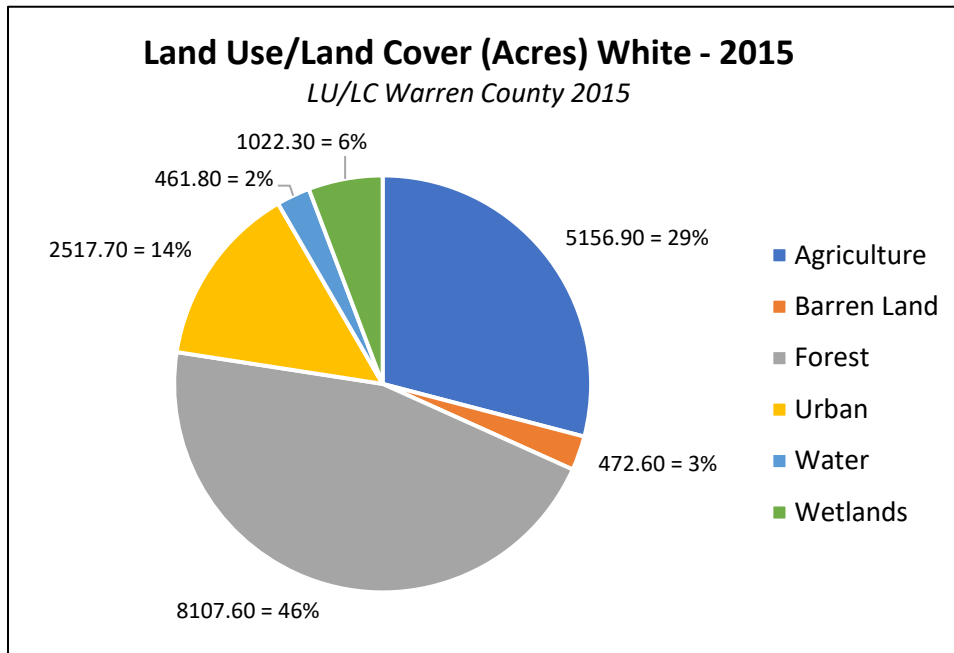
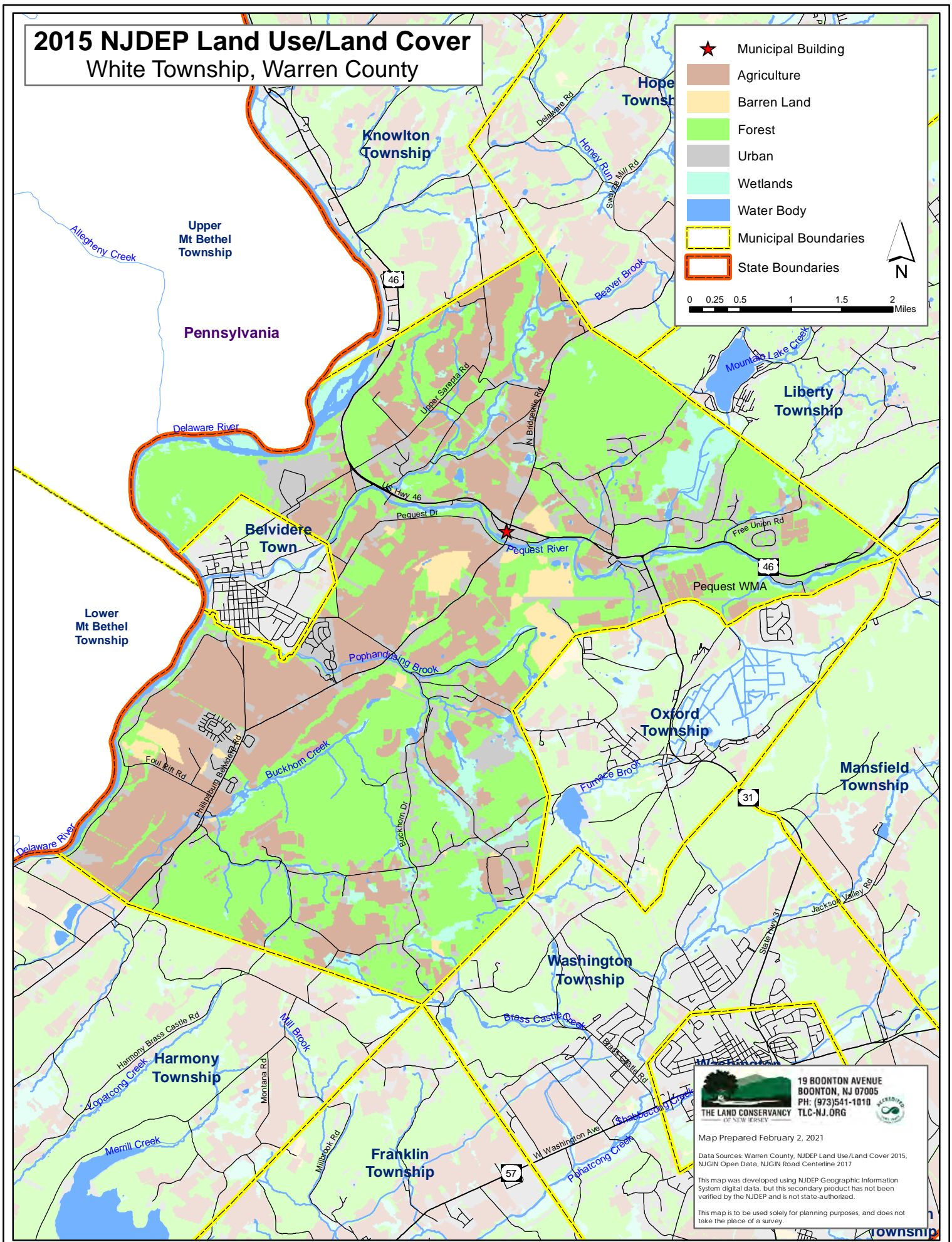


Figure 2. Land Use/Land Cover for White (NJDEP)

Table 1. 2015 Land Use/Land Cover for White and Warren County				
	White		Warren County	
	Acres	Percent	Acres	Percent
Agriculture	5,156.9	28.98%	53,590.13	23.09%
Barren	472.6	2.66%	1,450.88	0.63%
Forest	8,107.6	45.57%	108,685.87	46.83%
Urban	2,517.7	13.97%	41,001.00	17.67%
Water	461.8	2.60%	5,852.96	2.52%
Wetland	1,022.3	5.75%	21,480.52	9.26%

Source: NJDEP 2015 Land Use/Land Cover

Figure 3. Land Use/Land Cover Map for Hope Township



B. Soils

Soil types are determined by the parent bedrock material from which they were formed, the drainage characteristics they exhibit, and the steepness of the slopes on which they are found. Soil types are grouped into larger categories called soil series, which are based on the parent materials, chemical compositions, and profiles of their member soil types. Soil series are themselves grouped into broader categories, called soil associations, which were formed through similar processes.³ The Natural Resources Conservation Service (NRCS) classifies certain soils as prime, of statewide importance, or unique based on their potential for agricultural productivity.

- *Prime farmland soils*, as defined by the United States Department of Agriculture (USDA), rest on land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. They have the quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to acceptable farming methods. Prime soils flood infrequently and are not excessively erodible or saturated with water for a long period of time. There are 4,442 acres of prime farmland soils in White Township, of which 2,592 are in active agricultural use. Accounting for 25% of the total soils in the Township, these soils have been classified as belonging mostly to the *Hazen-Paulins Kill* (Hd xp) series, which can be used for hay, corn, small grains, vegetables, and deciduous fruits.
- *Farmland soils of statewide importance* produce high crop yields when treated and managed according to acceptable farming methods. However, their yields are rarely as high as those of prime soils. There are 3,932 acres of soils of statewide importance in White Township, of which 1,506 acres are in agricultural use. Accounting for 22.1% of White's soils, most of the soils of statewide importance belong to the *Netcong loam* (Net) and *Paulins Kill-Hazen* (Pdua) series and are generally adjacent to the prime farmland soils but on land with more slope. These soils largely support woodlands and idle fields.
- *Unique soils* exhibit specific qualities that may be favorable to the production of specialized crops. There are 161 acres of soils with unique importance in White Township, of which none are in active agricultural use. These soils have been identified as belonging to the *Catden series* (Catb) and are generally found in isolated pockets near streams in the more easterly portion of the Township.

The following major soil series (non-farmland) are also found in White Township:

- Nassau-Manlius (Nau) – 5,015 acres, or 5.7%
- Paulins Kill-Otisville (Pduo) – 1,105 acres, or 6.2%
- Rock outcrop (Chatfield-Hollis, Farmington, Farmington-Wassaic, Hollis, Parker, Farmington-Galway, Rockaway-Chatfield) – 2,329 acres, or 13%

Table 2 identifies the major soils in White Township, grouped by the NRCS classifications for agricultural soils and **Map 3** illustrates their location. Of the total land in White, 8,535 acres, or 48% of the town is identified as agricultural soil by the NRCS.

Table 2. Soil Categories – White Township		
Abbr	Name	Acres
AnoB	Annandale gravelly loam, 3 to 8 percent slopes	459.81
DefAr	Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded	193.79
DefBr	Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded	228.04
HdpxAb	Hazen-Paulins Kill complex, 0 to 3 percent slopes, very stony	586.05
HdpxBb	Hazen-Paulins Kill complex, 3 to 8 percent slopes, very stony	2,291.72
NetBb	Netcong loam, 0 to 8 percent slopes, very stony	682.59
	Prime Farmland Total	4,442.00
AnoC	Annandale gravelly loam, 8 to 15 percent slopes	736.39
NetCb	Netcong loam, 8 to 15 percent slopes, very stony	1,726.79
PaoC	Parker gravelly sandy loam, 3 to 15 percent slopes	32.86
PduaCb	Paulins Kill-Hazen complex, 8 to 15 percent slopes, very stony	1,435.73
	Farmland of Statewide Importance Total	3,931.77
CatbA	Catden muck, 0 to 2 percent slopes	160.92
	Farmland of Unique Importance Total	160.92
AhbBc	Alden silt loam, 0 to 8 percent slopes, extremely stony	6.51
AhcBc	Alden mucky silt loam, gneiss till substratum, 0 to 8 percent slopes, extremely stony	142.20
AnnCb	Annandale loam, 8 to 15 percent slopes, very stony	81.35
AnnDb	Annandale loam, 15 to 25 percent slopes, very stony	143.09
CaoBb	Califon loam, somewhat poorly drained, 0 to 8 percent slopes, very stony	53.00
CaoCb	Califon loam, somewhat poorly drained, 8 to 15 % slopes, very stony	73.04
ChkE	Chatfield-Hollis-Rock outcrop complex, NJ Highlands, 35 to 60 % slopes	489.27
ChwBc	Chippewa silt loam, 0 to 8 percent slopes, extremely stony	27.41
CoadBb	Cokesbury loam, dark surface, 0 to 8 percent slopes, very stony	95.62
FaxC	Farmington-Rock outcrop complex, 0 to 15 percent slopes	4.43
FdwB	Farmington-Wassaic-Rock outcrop complex, 0 to 8 percent slopes	92.45
FrdAb	Fredon-Halsey complex, 0 to 3 percent slopes, very stony	418.55
GkanBc	Gladstone loam, 3 to 8 percent slopes, extremely stony	125.32
GkanCc	Gladstone loam, 8 to 15 percent slopes, extremely stony	253.54
GkanDc	Gladstone loam, 15 to 25 percent slopes, extremely stony	187.40
HazAs	Halsey silt loam, 0 to 3 percent slopes, occasionally flooded	152.33
HhmBc	Hibernia loam, 0 to 8 percent slopes, extremely stony	383.16
HncD	Hollis-Rock outcrop-Chatfield complex, NJ Highlands, 15 to 35 %slopes	187.13
NauB	Nassau-Manlius very channery silt loams, 0 to 8 percent slopes, rocky	176.78

Abbr	Name	Acres
NauC	Nassau-Manlius very channery silt loams, 8 to 15 percent slopes, rocky	316.82
NauD	Nassau-Manlius very channery silt loams, 15 to 35 percent slopes, rocky	293.28
NauEg	Nassau-Manlius very channery silt loams, 35 to 60 % slopes, very rocky	228.16
PaoD	Parker gravelly sandy loam, 15 to 25 percent slopes	550.53
PawF	Parker-Rock outcrop complex, 45 to 65 percent slopes	652.45
PduoEb	Paulins Kill-Otisville complex, 25 to 60 percent slopes, very stony	1,104.73
PHG	Pits, sand and gravel	206.72
QY	Quarries	231.17
RnfC	Rock outcrop-Farmington-Galway complex, 8 to 15 percent slopes	184.16
RnfD	Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes	195.11
RoefBc	Rockaway loam, thin fragipan, 0 to 8 percent slopes, extremely stony	51.84
RoefCc	Rockaway loam, thin fragipan, 8 to 15 percent slopes, extremely stony	118.06
RoefDc	Rockaway loam, thin fragipan, 15 to 35 percent slopes, extremely stony	592.07
RokC	Rockaway-Chatfield-Rock outcrop complex, 8 to 15 percent slopes	38.16
RokD	Rockaway-Chatfield-Rock outcrop complex, 15 to 35 percent slopes	486.14
UccAs	Udifluvents, 0 to 3 percent slopes, occasionally flooded	18.24
UdaB	Udorthents, 0 to 8 percent slopes, smoothed	151.35
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes	257.29
USHBPB	Urban land-Hazen-Paulins Kill complex, 0 to 8 percent slopes	34.42
VepBc	Venango silt loam, 0 to 8 percent slopes, extremely stony	45.52
VepCc	Venango silt loam, 8 to 15 percent slopes, extremely stony	9.87
WATER	Water	383.56
	Not prime farmland Total	9,243.23
	Grand Total	17,777.92

Source: Natural Resources Conservation Service Soil Data Access website (2020)

The total land in active agricultural use (5,190 acres) represents 29% of White. Notably, most of these active agricultural acres in White Township are prime farmland. (Table 3) Active agriculture includes the following LU/LC types: agricultural wetlands, cropland and pastureland, former agricultural wetland, orchards/vineyards/nurseries, and other agriculture.

Soil Classification	Total Acres	Ag Acres	Ag % of Total
Prime Farmland Soil	4,442	2,592	58%
Soils with Statewide Importance	3,932	1,506	38%
Soils with Unique Importance	161	0	0%
Not Prime Farmland	9,243	1,092	12%
Total:	17,778	5,190	29%

Source: NRCS Soil Data Access 2020; 2015 NJDEP LU/LC data

Over one-quarter of Township land (5,109 acres) is located on slopes steeper than 15%.⁴ These soils tend to have a high risk of erosion, require management to control runoff and erosion and have some equipment limitations.

C. Irrigated Land & Water Sources

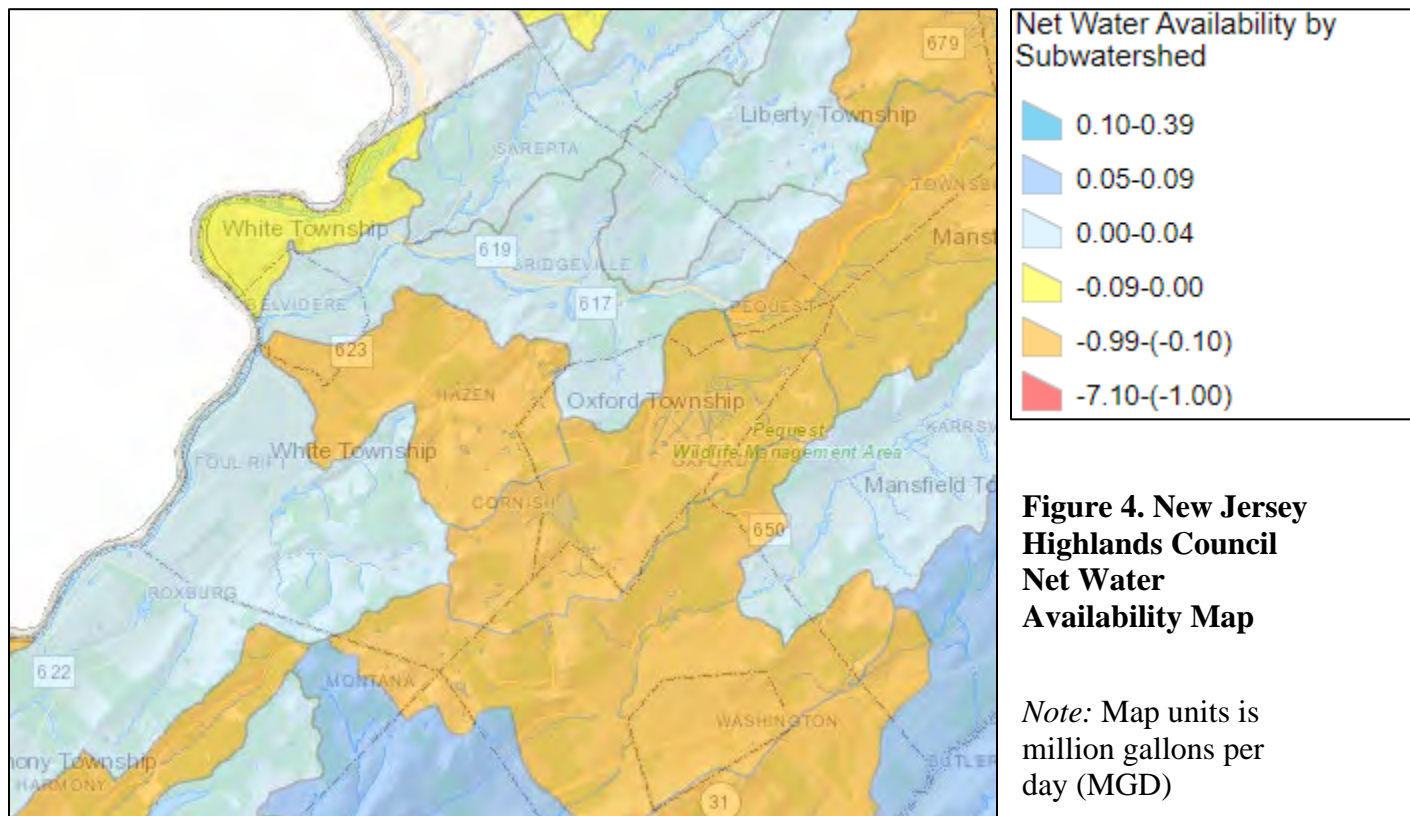
Groundwater provides the supply of water for irrigation in White Township. Due to local climate and soils, most of the crops that are grown in the Township, such as hay, corn, and soybeans do not require irrigation or are not cost effective to irrigate, even during drought periods, due to the large amounts of land they occupy. Irrigation is more suited to crops such as vegetables, since they occupy relatively small land areas. The Township had 89 acres of vegetables in 2017, with 6 acres in irrigation. More notably, eight acres of fruit were irrigated, up from zero in 2010. The 18 acres make up 0.22% of the Township’s farmland.⁵ (**Table 4** and **Table 5**)

	1990	2000	2010	2017
Field Crops	1	0	0	0
Fruit	36	5	0	8
Ornamental	0	5	5	4
Vegetables	1	1	2	6
Total	38	11	7	18
<i>Source: Farmland Assessments</i>				

	1990	2000	2010	2017
White	38	11	7	18
Warren County	376	335	220	618
Percent of County	10.1%	3.3%	3.2%	2.9%
<i>Source: Farmland Assessments</i>				

The Net Water Availability is calculated by deducting consumptive and depletive water uses from groundwater availability. White Township falls within several sub-watersheds with both a positive and negative net availability indicating that there are areas of the Township which may have inadequate water and other parts that have a surplus. (**Figure 4**)

As documented in the *Highlands Regional Master Plan*⁶, a great deal of land within White Township provides recharge for the groundwater supplies. A concern in the region is water quality for ground and surface water. White Township is not unique in that it lies in an area that has impaired water quality. The most prominent causes for impairment of water quality are fecal coliform bacteria, phosphorus, and temperature.



D. Farmland Trends & Statistics

The amount of farm assessed land base in White Township dropped slightly from 2010 (8,476 acres) to 2019 (8,285 acres), a 2% decrease (**Figure 5** and **Table 6**). Warren County farm assessed land base decreased 1.8% in the same period, from 105,937 to 104,014 acres.

The composition of the Township's farm assessed land has also changed during this time:

- Harvested cropland has decreased 27.1% (3.5% decline for the County)
- Pastured cropland decreased 76.2% (18% for the County)
- Permanent pasture decreased 56.4% (18% decrease for the County)
- Woodland has increased in acreage by 44.9% (6.2% for the County)

Harvested cropland, the largest category of active agricultural land in White, has declined 27% between 1983 and 2019, from 5,127 to 3,738 acres.^b Among the dominant crops in this category, hay, corn, and soybeans, the biggest losses occurred in corn and hay, which both declined 34% in the period 1983-2017 (the latest year for which data on individual crops is available). Corn dropped from 2,507 in 1983 to 1,649, and hay production fell from 1,679 to 1,108. This can most likely be explained by the loss of dairy farms in White, with dairy cattle showing a dramatic drop in numbers from 1,518 head in 1983 to 30 head in 2017. Soybeans are surging, from 82 acres in 1983 to 672 acres in 2017. Other crops such as rye and barley have virtually disappeared from production in White. Fruit, vegetable, and nursery crops, while representing a small portion of White's cropland, have decreased steadily since 1983, and together represented 372 acres, or 4.5% of total harvested cropland in 2017.

Pastured cropland decreased by 76% and permanent pasture decreased by 56% in the same period. This loss tracks with the decline in dairy and beef cattle operations, with beef cattle numbers dropping from 208 head in 1983 to 94 head in 2017. Equine operations dipped, with ponies and horses dropping slightly from 131 to 110, or a decrease of 16%. Inventory of turkeys, swine, goats, and other livestock are on the rise.

The acreage of farm assessed woodlands in White has increased; 2,697 acres in 1983 to 3,907 acres in 2019. Similarly, Warren County has experienced an increase in farm assessed woodland acres. There are two primary reasons for this. The first is that cropland left abandoned or fallow for extended periods of time undergoes ecological succession into forested land. The increasing costs of farming and farmland in the state and the county may compel local farmers to produce less land-intensive products and leave parts of their farms fallow. Secondly, continuously rising property taxes and the USDA forest stewardship incentives mentioned previously have encouraged more landowners of forested properties to obtain farmland tax assessment, thereby increasing the amount of forested farmland in the County.

Between 1983 and 2019, all farmland assessed categories experienced losses except for woodland. The gain in woodland was not enough to offset the overall loss in the farmland assessed agricultural land base. The Township's assessed agricultural land base dropped 14%, from 9,618 acres in 1983 to 8,285 acres in 2019.

In cropland harvested and cropland pastured, White has lost active agricultural land at a faster rate than County wide. Between 1983 and 2019, active agricultural land has decreased 37% in White, faster than 17% for Warren County. (**Table 6**)

^b General farmland assessment categories use the 2019 tax assessment data, while individual crop statistics are based on the most recent 2017 data.

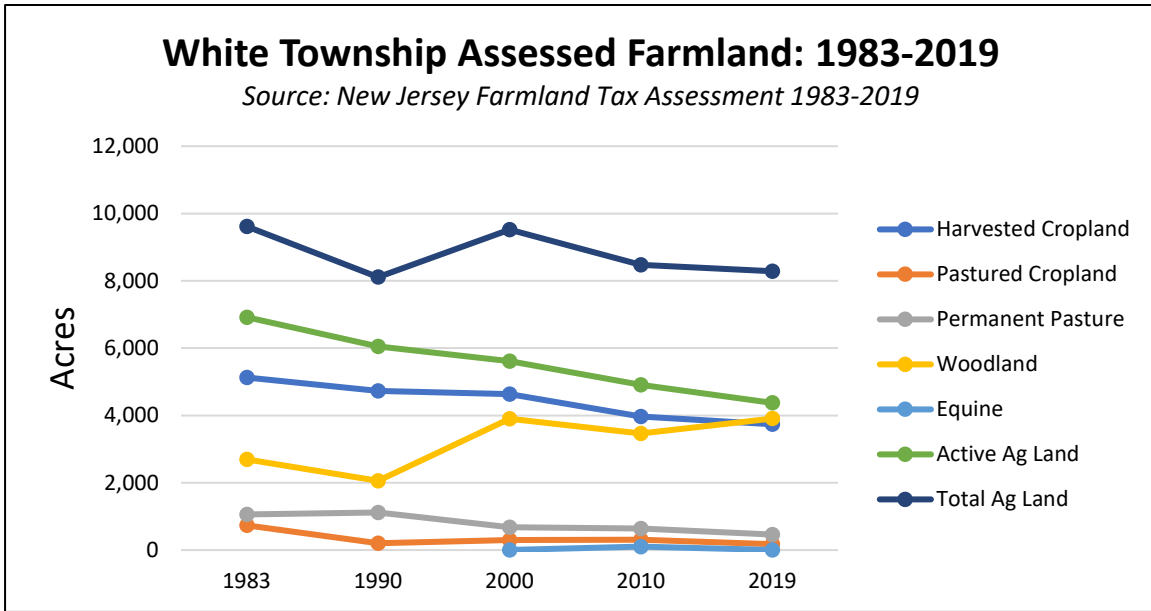


Figure 5. Assessed Farmland in White Township

Table 6. Farmland Assessment in White and Warren County (1983-2019) (acres)

	Cropland Harvested		Cropland Pastured		Permanent Pasture		Total Active Agriculture	
	White Township	Warren County	White Township	Warren County	White Township	Warren County	White Township	Warren County
1983	5,127	49,033	734	5,865	1,058	13,513	6,919	68,411
1990	4,732	53,057	204	6,588	1,117	15,172	6,053	74,817
2000	4,634	51,147	297	5,240	680	12,891	5,611	69,278
2010	3,967	45,056	303	4,244	642	11,861	4,912	61,161
2019	3,738	43,487	175	3,493	461	9,752	4,374	56,732
% Change	-27%	-11%	-76%	-40%	-56%	-28%	-37%	-17%

Source: Tax Assessment Data

The trend towards smaller average and median farm sizes has been prominent throughout New Jersey and Warren County over the past forty years. In contrast to a county wide 15% decrease in acreage since 1982, there has been a 51% increase in the number of farms, up from 608 to 918 in 2017. Following a continuing trend, the average farm size dropped from 144 to 80 acres.^{7 8} The 2017 *Census of Agriculture* indicates that for ZIP code 07823, which includes White Township and Belvidere, 27 of 58 farm operations were under 50 acres, 29 were 50 to 999 acres, and two were over 1,000 acres. The ZIP code tabulations also indicated that of these 58 operations, 44 farmers operated only land they owned, 8 farmers worked both land they owned and land they rented from others, and six farmers were tenant farmers, operating only land rented from others or worked for shares.⁹

The average size of Warren County farms was 80 acres in 2017, down from 159 acres in 1982. Additionally, the acreage within medium size farms (50 to 499 acres) is decreasing, indicating that many of these farms are breaking up into smaller operations. (Figure 6)

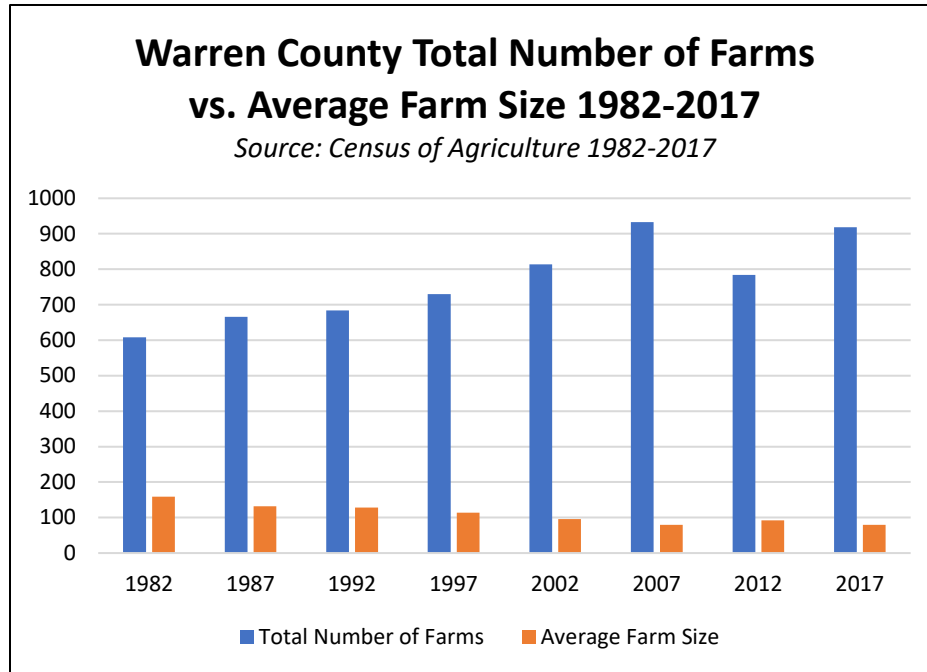
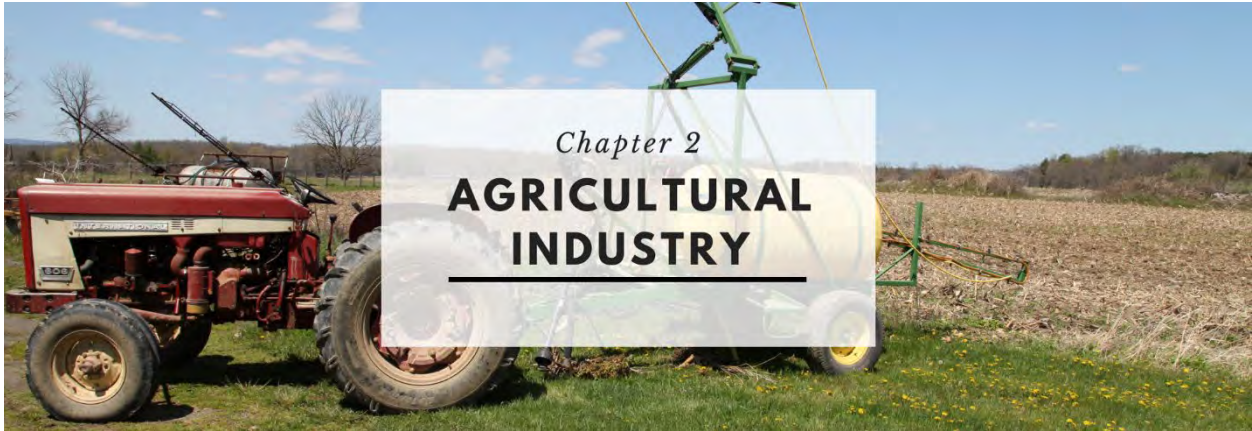


Figure 6. Average Farm Size in Warren County (1982-2017)

White has the fifth highest number of farm parcels in farmland assessment in Warren County. Its 192 approved farmland assessment forms represent 7.6% of the County total of 2,516 in 2019. However, average farm size, at 28 acres, is much smaller than the County average of 80 acres. Median farm parcel size is 10 acres, with as many parcels below that number of acres as above. The largest farm parcel in White is 251 acres. White ranks fifth in the County in total acres devoted to agricultural or horticultural use, at 8,285 acres, or 8.0%, versus number one ranked Franklin Township’s 10,998 acres, or 10.6%. **Table 7** shows the breakdown of farm parcel sizes in White based on the 2019 tax assessment data.

Size	# of Farms
Under 1 acre	11
1-9 acres	116
10-49 acres	128
50-179 acres	52
179+ acres	2

Source: White Township Tax Database (2019)



Chapter 2: Agricultural Industry

A. Trends in Market Value of Agricultural Products Sold

Agriculture in White is oriented to traditional field crops, including hay, corn and soybeans. Total agricultural sales in Warren County dropped slightly in 2017 from 2012. This reflects a decrease in livestock sales to \$26.1 million in 2017, an 18% drop from \$31.8 million in 2007, but a 25% increase above the low reported in 2002. Crop sales, including nursery and greenhouse products, rose 54% from \$43.6 million in 2007 to \$67.0 million in 2017.¹⁰ (Figure 7)

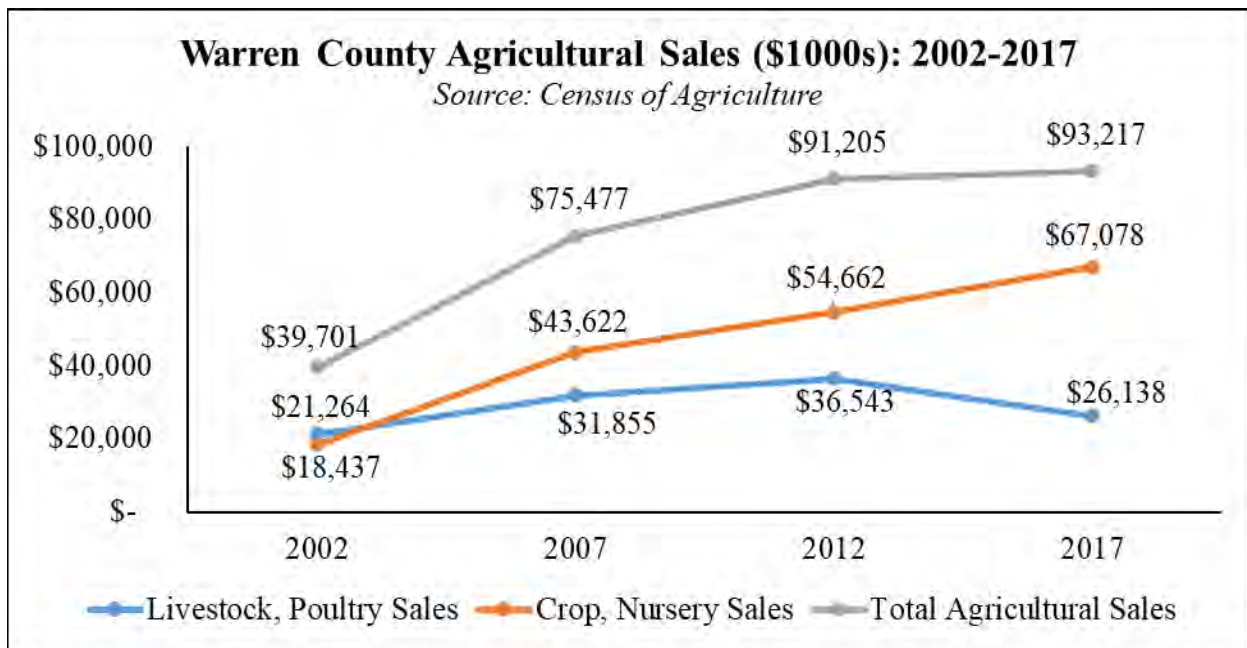


Figure 7. Agricultural Sales in Warren County

As of 2017, Warren County ranked sixth in the state in total agricultural sale revenues. (Table 8) At the same time, average sales per farm in Warren County dropped 12.7% from 2012 to 2017, the sixth-fastest rate of decline in New Jersey, but to a lesser degree than its neighboring counties. (Table 9)

County	Sales
Cumberland	\$ 212,649
Atlantic	\$ 120,673
Gloucester	\$ 102,454
Salem	\$ 102,342
Burlington	\$ 98,580
Warren	\$ 93,217
Hunterdon	\$ 92,246
Monmouth	\$ 80,633
Middlesex	\$ 38,359
Mercer	\$ 24,981
Morris	\$ 24,824
Ocean	\$ 24,640
Camden	\$ 22,893
Somerset	\$ 20,118
Sussex	\$ 18,226
Cape May	\$ 9,838
Passaic	\$ 2,863

Source: U.S. Census of Agriculture, 2017

Rank	County	2012	% Change	2017
1	Ocean	\$ 64,885	46.06%	\$ 94,769
2	Cumberland	\$ 292,216	29.95%	\$ 379,730
3	Camden	\$ 91,528	26.97%	\$ 116,210
4	Hunterdon	\$ 46,445	23.82%	\$ 57,510
5	Middlesex	\$ 147,733	19.66%	\$ 176,772
6	Gloucester	\$ 150,154	17.64%	\$ 176,644
7	Cape May	\$ 52,810	13.59%	\$ 59,988
8	Mercer	\$ 72,534	6.63%	\$ 77,341
9	Salem	\$ 135,749	-3.47%	\$ 131,040
10	Monmouth	\$ 102,565	-6.19%	\$ 96,221
11	Burlington	\$ 120,390	-10.51%	\$ 107,738
12	Warren	\$ 116,333	-12.71%	\$ 101,543
13	Atlantic	\$ 312,040	-14.06%	\$ 268,163
14	Sussex	\$ 21,078	-14.22%	\$ 18,081
15	Somerset	\$ 58,016	-23.28%	\$ 44,508
16	Morris	\$ 77,560	-23.43%	\$ 59,389
17	Passaic	\$ 44,045	-26.97%	\$ 32,168

Source: Census of Agriculture, 2012, 2017

In 2002, Warren County had the second largest concentration of dairy and livestock operations in New Jersey (236 farms). In 2017, with 182 farms in dairy and livestock, it is now third in the state.

Dairy sales have declined 64% in Warren County from \$9.0 million in 1997 to \$3.2 million in 2017. This is accompanied by a 74% decrease in dairy farms, from 63 in 1997 to 16 in 2017.

As of 2017, cattle and calves (2,346) are the most common livestock in Warren County, with beef cows (1,450 head) more prominent than dairy cows (896 head). Sheep (1,691 head) represent the second highest livestock animal, with meat chickens as third highest (842 count).

Crops in Warren County sold for a total of \$66.3 million in 2017, a 22% increase from 2012. **(Figure 8 and Table 10)** Nursery and greenhouse operations continues to exceed other crop types in Warren County. In 2017, Warren County had 26,364 acres of nursery stock crops, under glass or other protection.¹¹ Annual nursery sales comprised 41% of total agricultural revenue in 2007 (\$22.0 million) and increased to 61% of total revenue by 2017 (\$40.7 million).

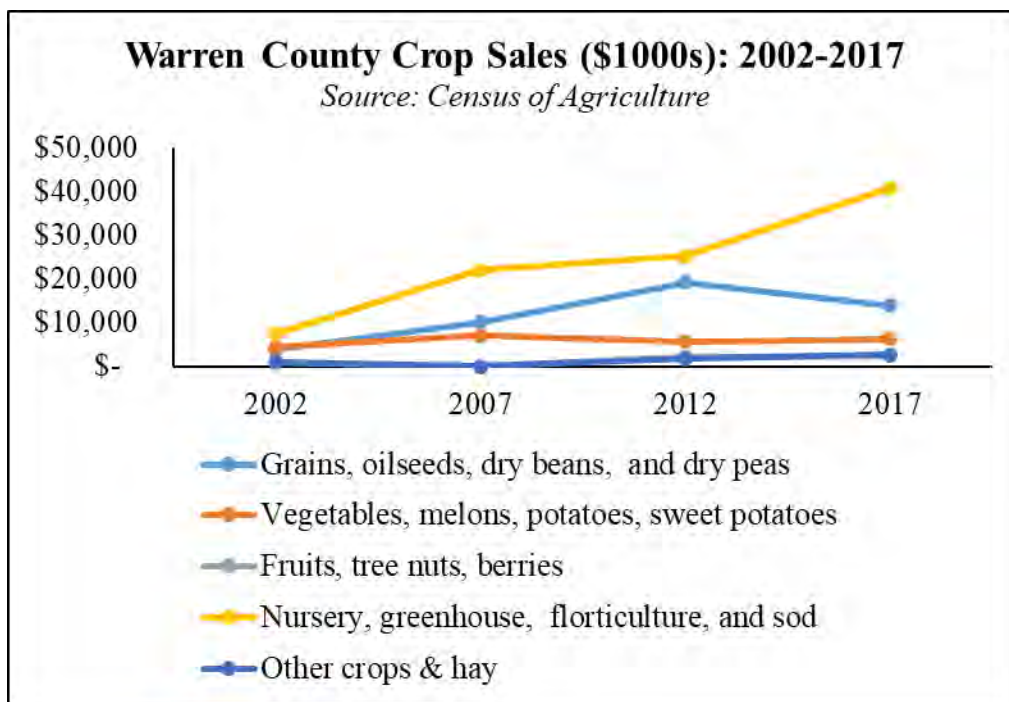


Figure 8. Crop Sales in Warren County (2002-2017)

	2002	2007	2012	2017
Grains, oilseeds, dry beans, and dry peas	\$3,802	\$10,205	\$19,209	\$13,922
Vegetables, melons, potatoes, sweet potatoes	\$4,406	\$7,114	\$5,769	\$6,388
Fruits, tree nuts, berries	\$918	N/A	\$2,198	\$2,601
Nursery, greenhouse, floriculture, and sod	\$7,601	\$22,053	\$25,248	\$40,793
Other crops & hay	\$1,114	N/A	\$1,808	\$2,656
Total	\$17,841	\$39,372	\$54,232	\$66,360

Source: U.S. Census of Agriculture (2002-2017)

Vegetables were the third highest-grossing crop in 2017, generating more than \$6.3 million in sales. Since 2002, vegetable sales have risen 44%.

Grains, which include corn and soybeans, ranked second to vegetable sales in 2017 and will most likely remain one of the top-grossing field crops.

A small but significant portion of Warren County’s agricultural sales come from other crops, including hay. Sales revenue for this category increased by 138% between 2002 and 2017.

Warren County is home to many fruit farms. Farm sales began growing rapidly during the mid-2000s, going from \$0.91 million in 2002 to \$2.6 million in 2017. Much of this revenue derives from peach and grape sales. Peach farms increased by over 29% in this period, despite acreage falling 49%.

B. Agricultural Production Trends

From 2005 to 2019, agricultural production in White declined for both beef cattle (13%) and mature dairy (99%).¹² **(Figure 9)** The number of beef cattle has remained relatively consistent with a high of 88 head in 2005 and a low of 77 in 2019. Meat chickens rose nearly 100% to 145 head from 2005 to 2010 but decreased by 2019 to 1 head. **(Table 11)** Corn for grain decreased from 1,694 acres in 2005 to 1,356 acres in 2019. **(Figure 10)** Hay stayed relatively stable, increasing by 12 acres from 2005 to 2019. **(Figure 11)** Soybean production maintained its upward trajectory through 2002, growing 140% from 2002 to 2019. **(Figure 12)**

The variation in milk sales has contributed to a reduction in dairy output. From 2002 to 2019, mature dairy decreased by 99%. The biggest drop occurred between 2007 and 2012, when dairy production fell by 45%.

Production Trends in White Township (2005-2019)

Source: Warren County Farmland Assessment

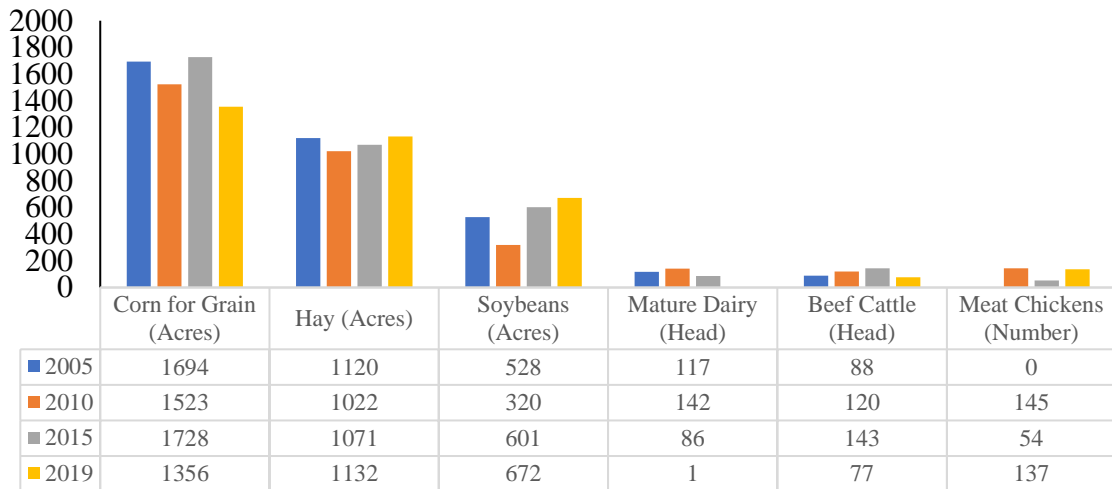


Figure 9. Production Trends in White Township

Table 11. Dominant Crops in White Township

Top 10 Dominant Crops	2019	% Change
Corn for Grain	1356	-
Other Hay	1009	-25.59%
Soybeans	672	-33.40%
Alfalfa Hay	123	-81.70%
Christmas Trees	112	-8.94%
Wheat	88	-21.42%
Corn for Silage	77	-12.50%
Apples	58	-24.68%
Other Mixed Vegetables	43	-25.86%
Cut Flowers	40	-6.98%
Total	3578	
		% of Total
Field Crops	3325	92.93%
Nursery Crops	152	4.25%
Fruits & Berries	58	1.62%
Vegetables	43	1.20%

Source: 2019 Warren County Farmland Assessment Data

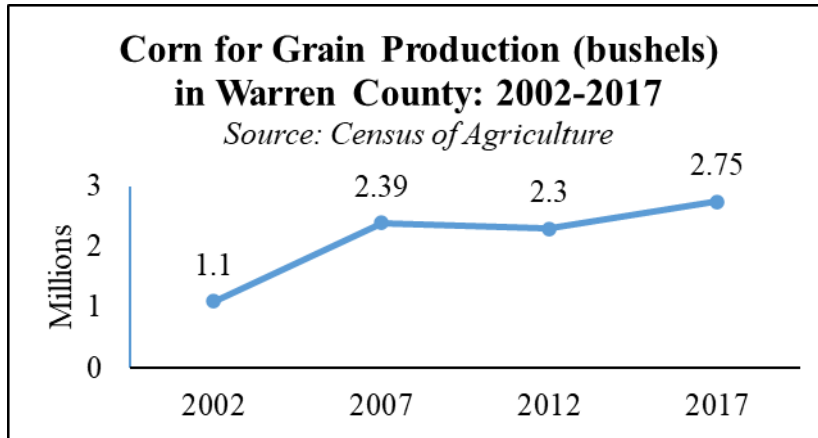


Figure 10. Corn for Grain Production in Warren County

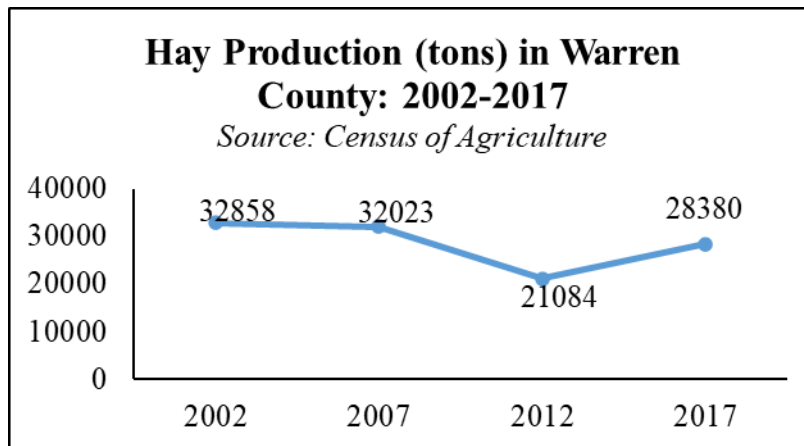


Figure 11. Hay Production in Warren County

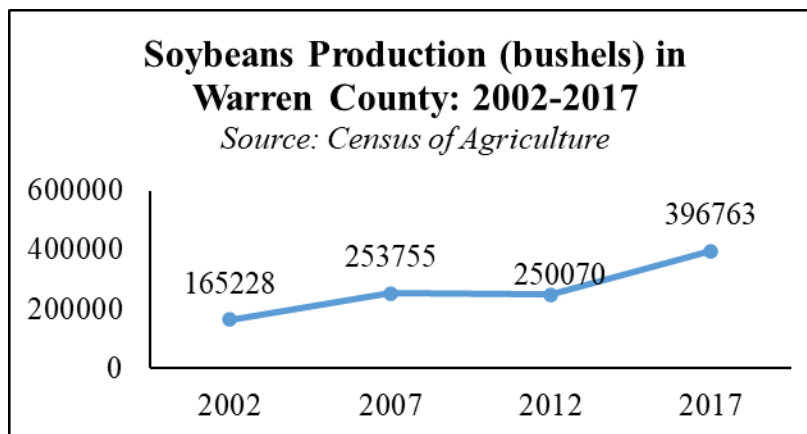


Figure 12. Soybean Production in Warren County

Livestock production, including beef cattle and meat chickens, have either had slight growth or remained stable since 2002. Chicken production grew by 2% from 2002 to 2007 but dipped 9% by 2017. Beef cattle fell by 8% in 2007, then rose by 20% by 2017, netting a 12% growth rate through the 2000s. (Figure 13)

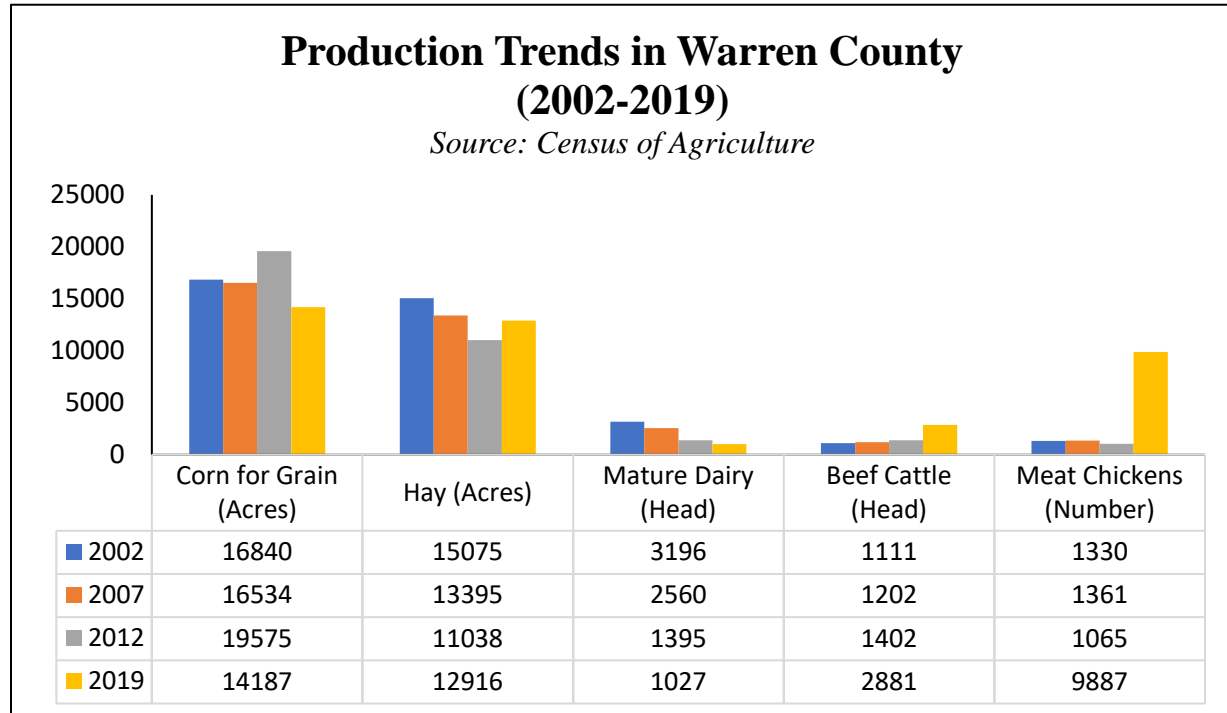


Figure 13. Production Trends in Warren County

C. Agricultural Support Services and Related Industries

Agricultural support services in Warren County and White Township include tractor sales and supply stores, feed vendors, and hardware/equipment retailers. Retailers include Frank Rymon and Sons, Tractor Supply Co, and Growmark in Bloomsbury. Major feed vendors in and around Blairstown include Agway and North Warren Farm & Home Supply, supporting the nearby cattle farmers. In Hackettstown, the Livestock Auction operates as an independently funded co-operative.¹³ As the last remaining auction in New Jersey, the Livestock Auction gives county farmers and farm suppliers a unique marketplace in which to trade and sell products.

Local support businesses are often insufficient to meet all the needs of the Township’s agricultural community. Consequently, local farmers have become adept at minimizing repair services by fixing a variety of mechanical problems themselves. The Township’s farmers also rely heavily upon mail order and out-of-state retailers for their agricultural supplies. Processing facilities such as creameries and lumber mills are now absent in the area, which forces farmers to ship their products out-of-town to be processed. Some farmers have found that reliance upon out-of-state suppliers and non- local processing facilities imposes transportation costs that cut deeply into their operations’ profitability.

Despite the loss of support businesses from the region, local farms take advantage of retailers, large animal veterinarians, and feed suppliers located outside of the county and in eastern Pennsylvania. A comprehensive list of farm related businesses, organizations, and services in New Jersey is available through the Rutgers Cooperative Extension of Salem County Green Pages.¹⁴ (**Appendix B**)



Chapter 3: Land Use Planning Context

A. State Development and Redevelopment Plan

The *State Development and Redevelopment Plan* (SDRP) outlines general policy objectives concerning land use and future development in the State.¹⁵ The combination of Planning Areas and Designated Centers establishes a comprehensive framework for pursuing land use and development regulation throughout New Jersey. Land in White Township is included within the Rural Planning Area (PA4), the Rural Environmentally Sensitive Planning Area (PA4B) and the Environmentally Sensitive Planning Area (PA5): **(Figure 14)**

- Rural Planning Areas (PA4): 10,902 acres (~62% of the municipality), located exclusively in the north and southwestern portions of the Township.
- Rural-Environmentally Sensitive Planning Area (PA4B): 619 acres (~4%) and occupy much of the southwestern portion of the Township proximate to the Rural Planning Area.
- Environmentally Sensitive Planning Areas (PA5): These lands occupy much of the northern section of the Township as it rises to the Kittatinny ridgeline, where they border state and federal public lands. There are also pockets of environmentally sensitive land along and south of the Paulins Kill. This Planning Area occupies approximately 4,447 acres (~25%) of the Township.
- Parks and Natural Areas: 1,544 acres (~9%), located primarily in the north-central and north-western sections of the Township.

Centers are defined by the New Jersey State Planning Commission as “compact forms of development that, compared to sprawl development, consume less land, deplete fewer natural resources and are more efficient in the delivery of public services.” Three areas in White that have been identified as centers are Bridgeville, Butzville, and Foul Rift.

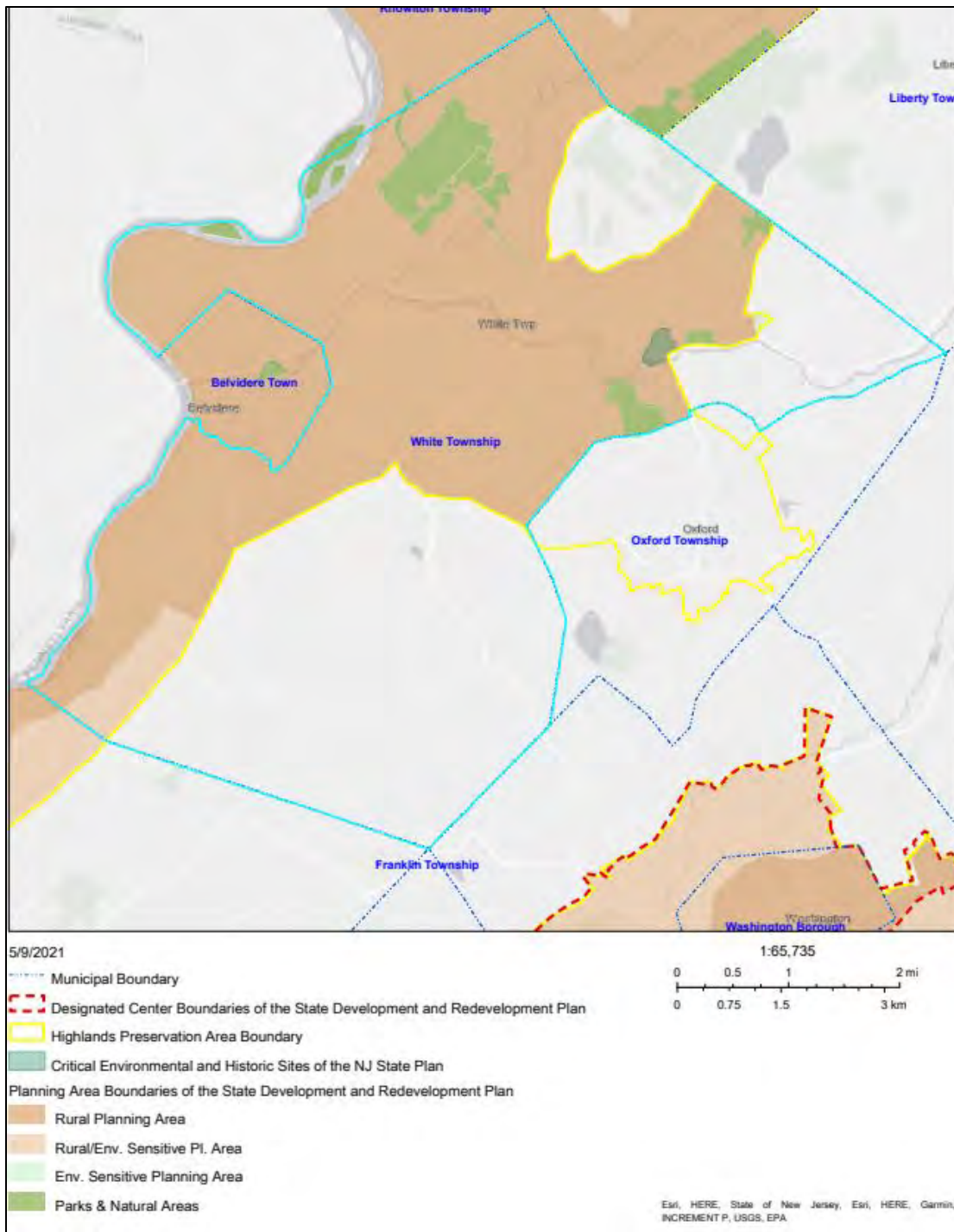


Figure 14. State Development and Redevelopment Plan: White Township

B. Special Resource Area: Highlands Region

The New Jersey State Legislature enacted the Highlands Water Protection and Planning Act (HWPPA) on August 10, 2004. The Highlands region covers 13% of New Jersey’s land area. Situated in northwestern New Jersey, its boundaries fully enclose White Township. The impact for White is twofold: their advantage of containing many areas defined as high priority for agriculture and protecting flood-prone areas.

Roughly 7,812 acres (44% of the town) east of County Route (CR) 519 and west-southwest of CR 623, along with portions of the northern border with Hope and Liberty Townships, and in the northeast corner adjacent to Liberty and Oxford Townships, fall within the Highlands Preservation Area, and are subject to the strict standards that apply there (**Figure 15**). The Preservation Area in White Township approximately corresponds with “Environmentally Sensitive” and “Park” land, as indicated in the SDRP, and includes many of the town’s slopes that are greater than 10%. The Preservation Area also encompasses about 3,999 acres of the Township’s total farmland (42%). The remainder of the Township, in its southern, central, northwest, and western portions, and along portions of the northern boundary with Hope and Liberty Townships, (approximately 9,984 acres, or 56%) falls within the Planning Area.¹⁶

The *Highlands Regional Master Plan* (RMP) identifies an Agricultural Resource Area (ARA) that will receive much of the future funding and institutional support from the Highlands Council. The ARA encompasses areas that contain contiguous farmbelts and quality agricultural soils. Virtually all of White Township falls within the ARA (**Figure 16**).

The RMP also identifies Agricultural Priority Areas – subsets of the larger ARA that are particularly well-suited to agricultural production. Criteria used to delineate these areas include soil quality, tillable acreage, buffers, development potential, local commitment, contiguity with other farm parcels and size.¹⁷ Most of the land in White Township west of County Route 519 (south of Belvidere), and east of and adjacent to Belvidere, is designated as High Priority Agricultural Areas, which roughly corresponds with many of the prime farmland soils in the Township. (**Figure 17**)

C. Municipal Master Plan

The White Township *Master Plan* was first adopted in 1972 and was revised in 1978. Comprehensive master plan updates were adopted in 1982 and in 2004. A *Master Plan Amendment* was adopted in 1999 to recommend the creation of the LDI Low Density Industrial Zone from a portion of the R-1 Zone. The *2004 Master Plan* was reexamined in 2014. The *2020 Master Plan Amendment* recommended changes in zoning to address land use inconsistencies in the Township.¹⁸ The 2020 Master Plan goals related to farmland preservation include:

- The preservation of the Township’s rural character
- Base the land use plan on environmental features such as prime agricultural soils.
- Protect the sole source aquifer within the Township.
- Promote statewide objectives for agricultural land retention and open space preservation.

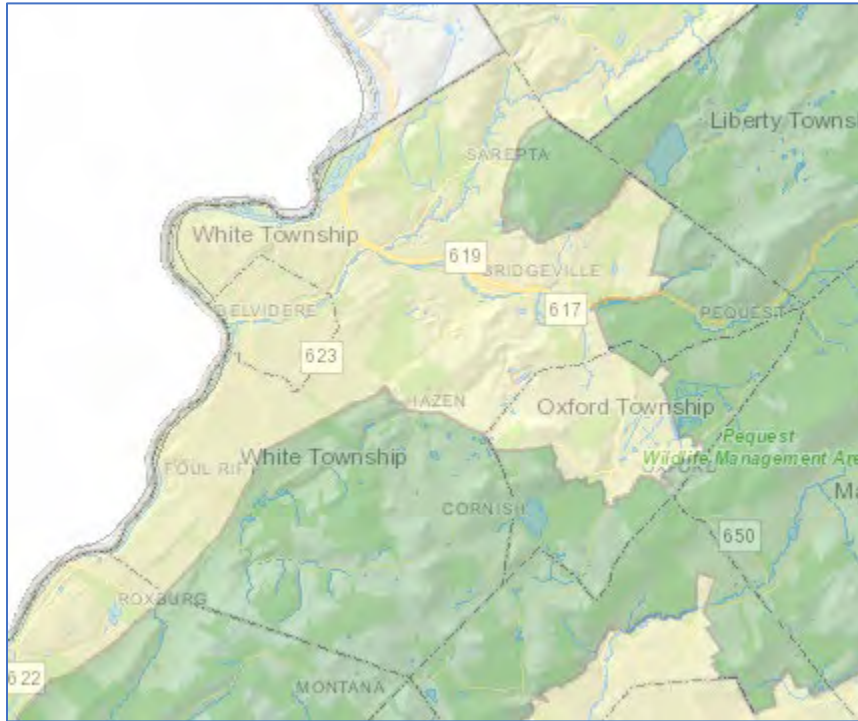


Figure 15. Highlands Preservation and Planning Areas in White Township

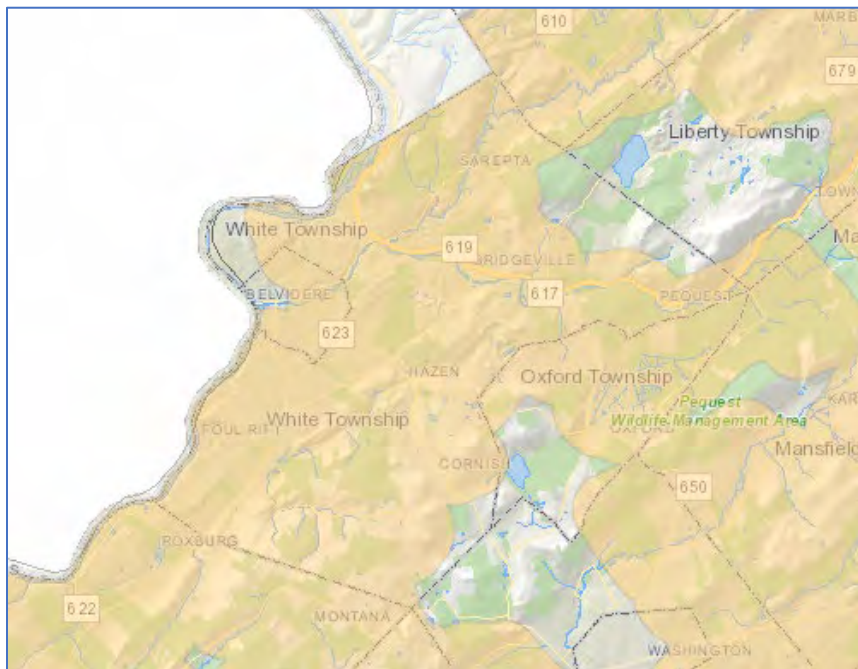


Figure 16. Agricultural Resource Areas in White Township

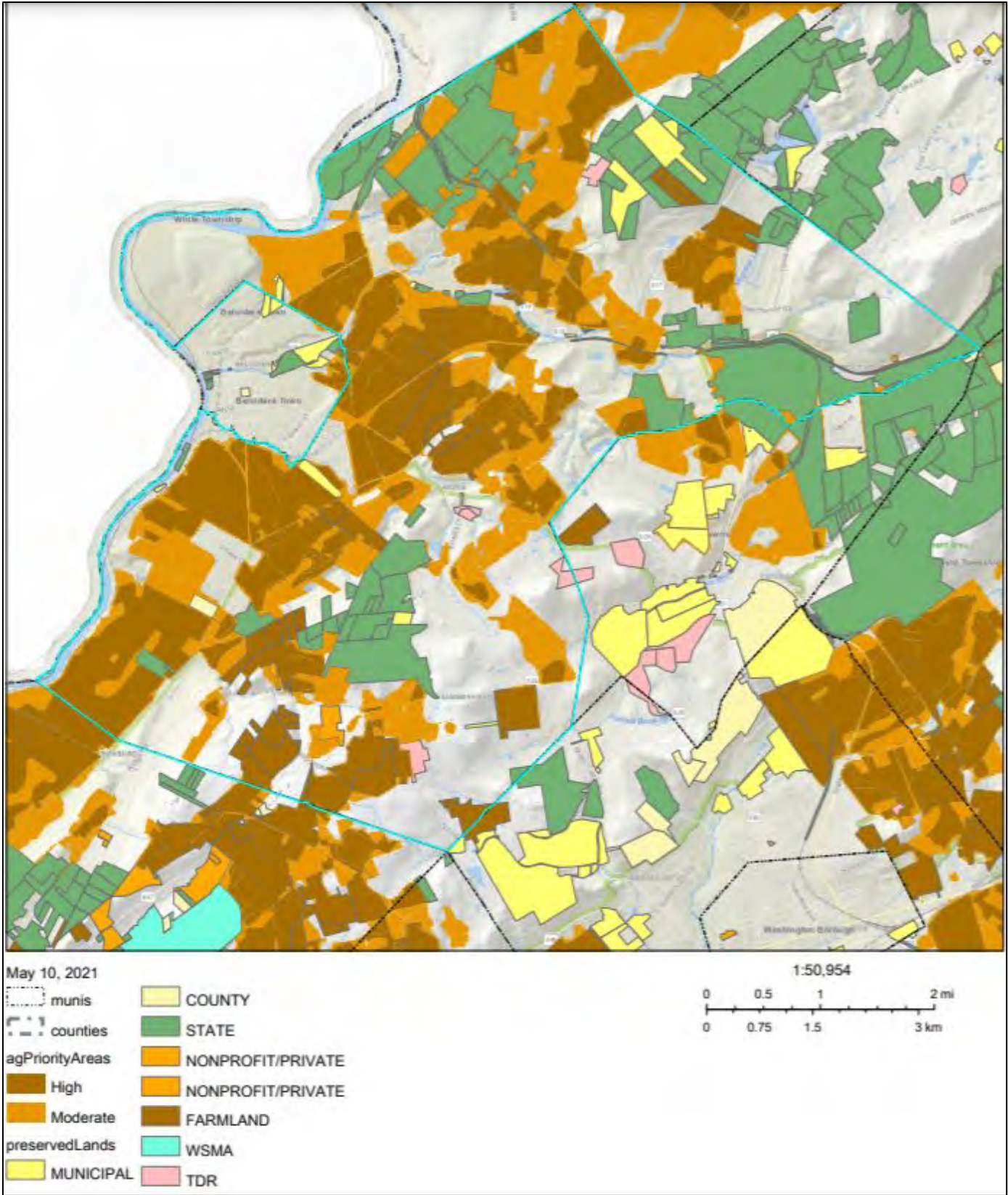


Figure 17. Agricultural Priority Areas in White Township

D. Land Use Trends

The land use patterns of White Township were first established during the eighteenth century. The Township is one of the earliest parts of Warren County to be settled by Europeans, with permanent settlements dating back to 1726.

According to the 2015 NJDEP LU/LC data, forested areas make up the largest percent of White’s lands (45%), with agricultural and urban uses are second and third at 28% and 14% respectively. White has seen a slight reduction in relative agricultural use and a slight increase of in urban land. (**Figure 18**)

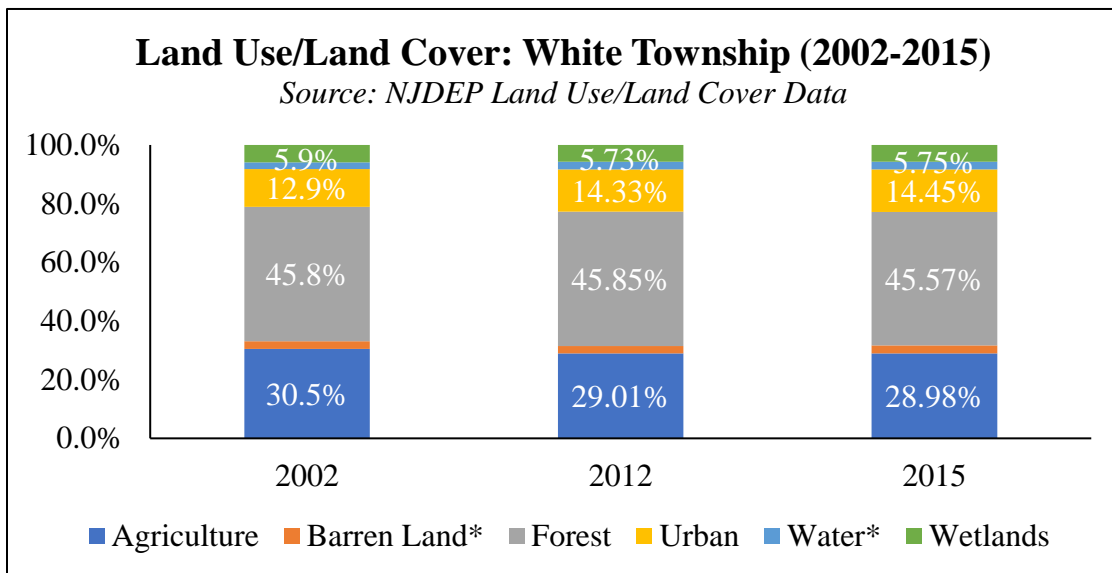


Figure 18. Land Cover from 2002-2015: White Township

*Note: *These categories each represent <3% acreage*

E. Public Infrastructure – Sewer and Water

Publicly provided sewer and water service is provided in portions of White Township as part of the Pequest River Municipal Utilities Authority facilities for both Oxford Township and Belvidere Town. Future growth of the sewer service areas served by this Utility Authority is projected. The White Township Future Wastewater Service Area has been expanded to include existing developed areas along US Route 46 and County Route 519 that are currently served by onsite septic systems. The remainder of the Township is on private septic systems.¹⁹

F. Municipal Zoning

1. Types, Lot Size, and Distribution in the Municipality

The Township zoning map was most recently revised in 2020. **(Figure 19)** In the *2020 Master Plan Amendment*, the Planning Board provided recommendations for rezoning in the R-1, R-2, N-C, H-D, O-B, I, I-2, and LDI zones. The Planning Board also recommended that the H-D and O-B zones permit conditional self-storage use and upheld that the C-C District should not permit flex/warehouse use.

The R-1 (Detached Single-Family Residence District) and the I (Industrial District) comprise the top two largest percentages of all zones. As of 2020, the Township is 1.3% zoned <1 acre/unit, 91.2% as medium lots (1-5 acres/unit), and the remaining 7.5% as large lots (>5 acres/unit). **(Table 12 and Figure 19)** All zones, except the R-2 District, allow farms as principal permitted uses. As commercial uses grow, the Township will monitor its proximity to, and potential disturbance of, farmlands.

Table 12. White Township Zoning Districts by Lot Size

Zone	Acres	% of Land	Min. Lot Size
R-1: Detached Single-Family Residence District	13,594.99	78.26%	3 acres
R-1B: Single Family and ARC District	145.20	0.84%	-
R-2: Single-Family Detached Residence District	11.91	0.07%	65,000 sq ft
R-3: Garden Apartment District	35.41	0.20%	4,356 sq ft
R-4: Mobile Home District	49.94	0.29%	7,260 sq ft
N-C: Neighborhood Commercial District	77.73	0.45%	2 acres
C-C: Community Commercial District	203.22	1.17%	2 acres
H-D: Highway Development District	198.22	1.14%	2 acres
O-B: Office Building District	64.53	0.37%	5 acres
I: Industrial District	1319.92	7.60 %	2 acres
IL: Light Industrial District	8.68	0.04%	2 acres
I-2: Industrial-Quarry District	355.87	2.05%	2 acres
LDI: Low Density Industrial District	1306.03	7.52%	7.5 to 15 acres
Total	17,371.65	100.00%	
<i>Source: White Municipal Code, 2020 Master Plan Amendment</i>			

2. Adopted Redevelopment Areas

There are no adopted redevelopment areas in White Township.

Figure 19. Zoning Map

ZONING DISTRICTS	
R-1	DETACHED SINGLE-FAMILY RESIDENCE DISTRICT
R-1B	SINGLE-FAMILY AND ARC DISTRICT
R-2	SINGLE-FAMILY DETACHED RESIDENCE DISTRICT
R-3	GARDEN APARTMENT DISTRICT
R-4	MOBILE HOME DISTRICT
N-C	NEIGHBORHOOD COMMERCIAL DISTRICT
C-C	COMMUNITY COMMERCIAL DISTRICT
H-D	HIGHWAY DEVELOPMENT DISTRICT
O-B	OFFICE BUILDING DISTRICT
I	INDUSTRIAL DISTRICT
IL	LIGHT INDUSTRIAL DISTRICT
I-2	INDUSTRIAL-QUARRY DISTRICT
LDI	LOW DENSITY INDUSTRIAL DISTRICT
SR	SOIL REMOVAL AND SURFACE MINING DISTRICT AS AN OVERLAY DISTRICT (SEE § 71-88.4.)

ZONING MAP

APRIL 22, 2002
 REVISED FEBRUARY 26, 2004
 REVISED MAY 12, 2004
 AMENDED AUGUST 9, 2007
 REVISED FEBRUARY 18, 2010
 REVISED MAY 30, 2019
 REVISED FEBRUARY 13, 2020
 REVISED MARCH 12, 2020



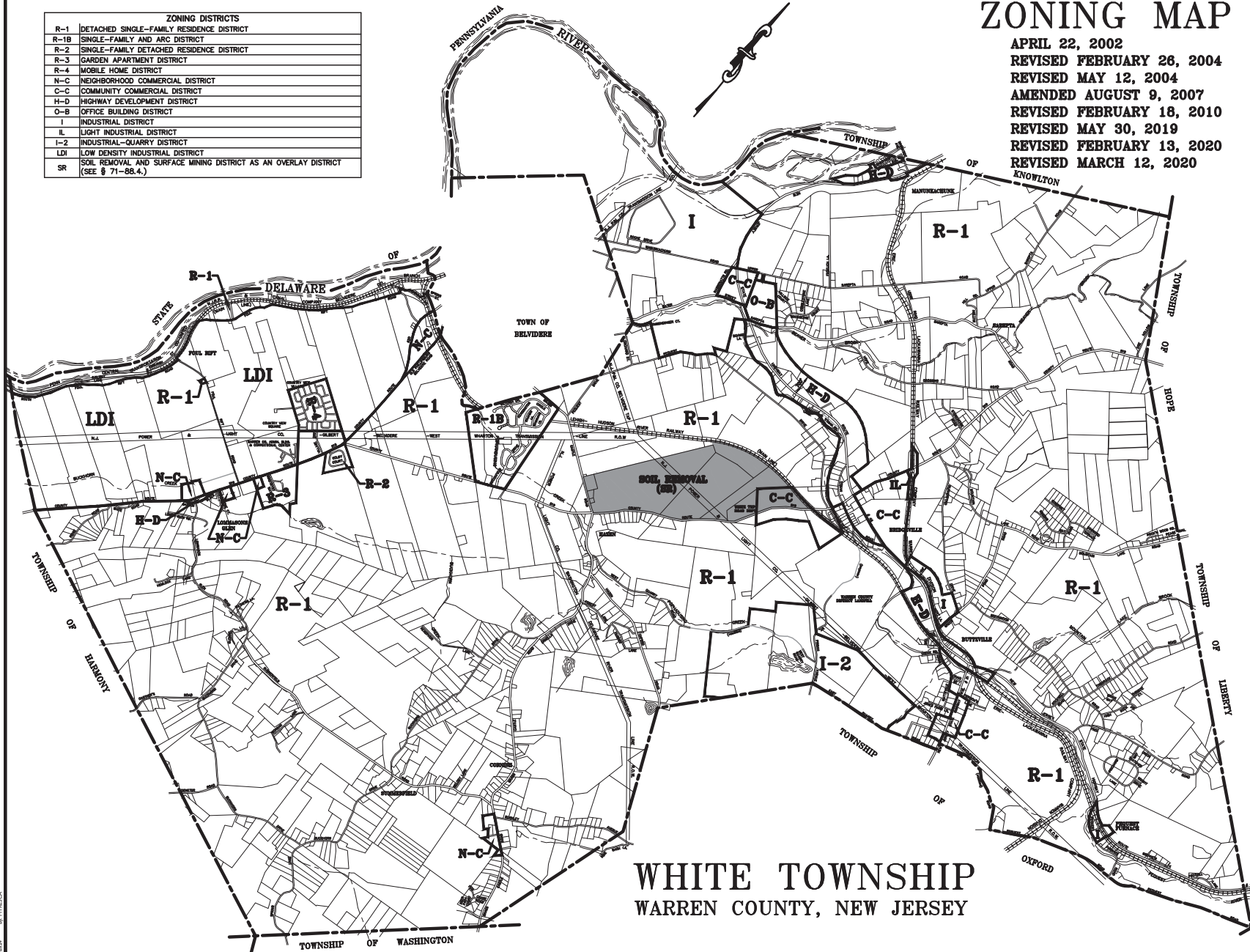
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State of N.J. C.O.A.: 24GA27986500

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WHITE TOWNSHIP WARREN COUNTY, NEW JERSEY

REV	DATE	DRAWN BY	DESCRIPTION

ZONING MAP
FOR
WHITE TOWNSHIP

TOWNSHIP OF WHITE
WARREN COUNTY
NEW JERSEY

CLINTON OFFICE
 Shelbourne at Hunterdon
 53 Frontage Road
 Suite 110
 Hampton, NJ 08827
 Phone: 908.238.0900
 Fax: 908.238.0901

SCALE: AS SHOWN	DATE: 05/30/2019	DRAWN BY: MJT	CHECKED BY: PMS
PROJECT NUMBER: WHT001	DRAWING NAME: C-ZONE		

SHEET TITLE:
ZONING MAP

SHEET NUMBER:
1 of 1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

3. Innovative Planning Techniques

There are mandatory and volunteer options for a municipality to use to set aside land for farmland and/or open space. Voluntary options are ones a town can use when determining maximum lot sizes and mandatory set asides for resource protection. If the municipality turns to mandatory cluster provisions or a mandatory transfer of development rights (TDR) program, the Agricultural Advisory Committee (AAC) will work the Planning Board to ensure agriculture resources and land are set aside in a manner to ensure viability of the farm in the future.

Cluster zoning allows development to occur on a smaller percentage of a site while retaining the net development density permitted by local zoning. A common cluster zoning provision would allow (or require) 50% of a site to be preserved in its natural or agricultural state and would permit the other half of the site to be developed at twice the allowable zoning density. Some clustering ordinances require that certain sensitive natural areas or prime farmlands on a development site be preserved. Cluster zoning provides both the ability to develop a site to its full extent based on zoning and the preservation of contiguous agricultural lands.²⁰

This option is often attractive to builders because there tends to be fewer infrastructure costs associated with roadway construction, power lines, and sewage connections in more compact developments. Clustering is attractive to residents and farmers because it retains some agricultural areas and the rural character they create. Additionally, the undeveloped portions of clustered developments are permanently deed restricted, which helps to ensure the permanence of local farming. Clustering has added effectiveness when open space set-asides on adjacent properties are linked in a coordinated fashion. This requires pre-planning on the part of the municipality. Cluster zoning is not currently used in White Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development.

Lot size averaging is another planning tool that maintains the net allowable zoning density on a site but does not enforce uniform lot size requirements or setbacks. This allows for some development lots to be very small to accommodate affordable housing units, neighborhood commercial stores, or “village” development densities, while other lots can be large to encompass active farms or natural areas.

Transfer of Development Rights (TDR) is a growth management tool that allocates development rights from one location (the preservation or “sending” area) to another (the development or “receiving” area). These development rights are purchased by developer and allow them to build at higher densities within the receiving zone than existing zoning permits. Viewed as an equity protection mechanism, transfer-of-development rights provides for the preservation of important agricultural lands while fully compensating landowners and minimizing public expenditures. To date, this program has not been utilized by White Township to preserve farmland.

The New Jersey State TDR Act (N.J.S.A. 40:55D-140) authorizes the TDR by municipalities and outlines what a town must do to adopt or amend a TDR ordinance. First, the municipality must amend its master plan to include a Development Transfer Plan Element that outlines a mechanism for assigning development credits to areas in the sending zone and reapplying them

to areas in the receiving zone. An updated Utility Service Plan and Capital Improvement Program for the receiving zone should be adopted as well. The municipality must also prepare a Real Estate Market Analysis (REMA) that quantifies the development potential of the sending zone(s) and the capacity of the receiving zone(s) to accommodate additional development. Finally, a town must receive approval from the State Planning Commission to adopt the TDR ordinance. (N.J.S.A. 40:55D-140)

4. Buffer Requirements

In accordance with state and county regulations, there are multiple mechanisms through which agricultural uses are separated from other uses. At the state level, both the NJDEP and the NJDA offer guidelines. NJDEP's Freshwater Wetlands Protection Act Rules provide permit and other administrative exemptions for a range of farming activities, which helps to protect inland water resources. Similarly, NJDEP's Flood Hazard Area Control Act Rules, most recently amended in February 2015, now include numerous agricultural permits-by-rule. The following agricultural activities are included:

- Continuing ongoing agricultural activities that result in no fill,
- Commencing new agricultural activities that result in no fill,
- Undertaking soil conservation practices outside a floodway, and
- Constructing an agricultural building of no more than 1,000 square feet outside a floodway.

There are seven general permits which allow the continuation of agriculture activities, including soil erosion control, bank stabilization or bank restoration; channel cleaning, constructing a roadway across a water body, filling a manmade water body for freshwater wetlands restoration, creating a ford across a water body to manage livestock, constructing a fence across or along a water body to manage livestock, and constructing a pump or water intake for livestock, in otherwise regulated areas.

The buffering requirements for White Township are in Section 160-128A(3) of the municipal code. Properties with farms are not allowed to utilize the portion of the lot within 50 feet of a residential property line for the housing of livestock or poultry or for the storage of fertilizer, produce or equipment.

5. Development Pressures and Land Value

Despite its limited access to regional highways and mass transit, White Township has experienced significant growth, particularly beginning in the 1960s through 1990. White's current population, based on New Jersey Department of Labor figures, was 4,656 individuals in 2019.²¹ This is a 4% decrease from 2010, consistent with what has been occurring county-wide with individuals leaving or not resettling back into the rural sections of northwestern New Jersey (both Sussex and Warren Counties). (**Figure 20** and **Table 13**)

In the period between 2009 and 2019, growth slowed, due to the 2008 economic recession. In 2019, White's building permits represented about 0.60% of total county permits.²²

The residential permits approved in 2019 were only 1.37% of the amount issued in 2003 (one permits versus 73 in 2003), when permit numbers peaked. **(Figure 21)** Warren County has experienced a similar trend, only issuing 12% of permits in 2018 compared to its numbers in 2000.

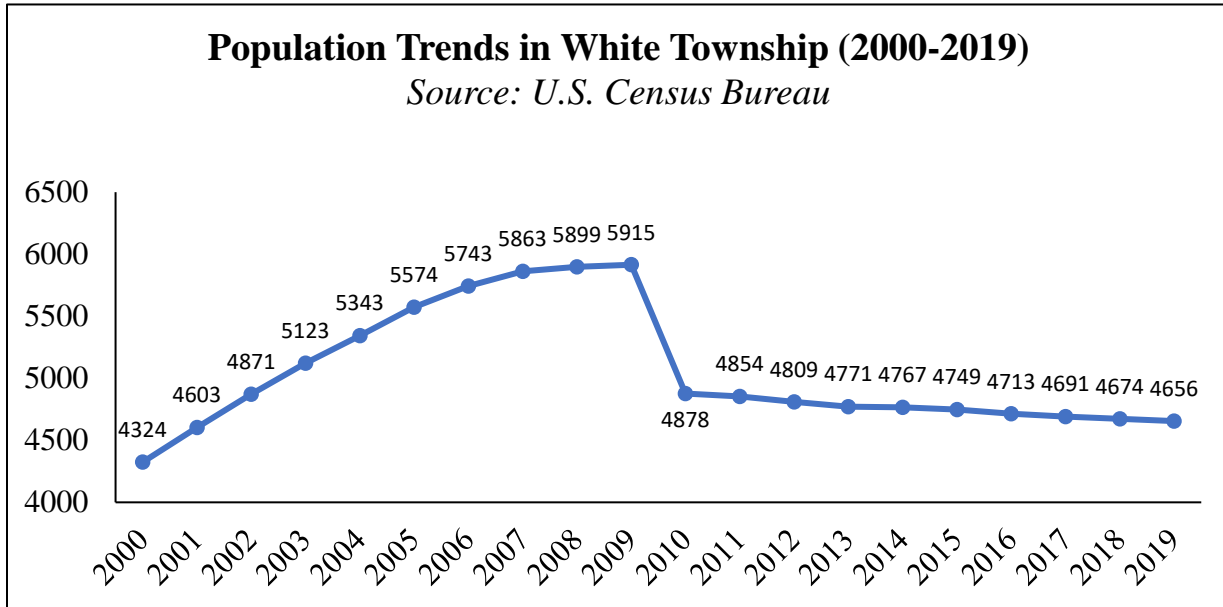


Figure 20. Population Trends in White Township

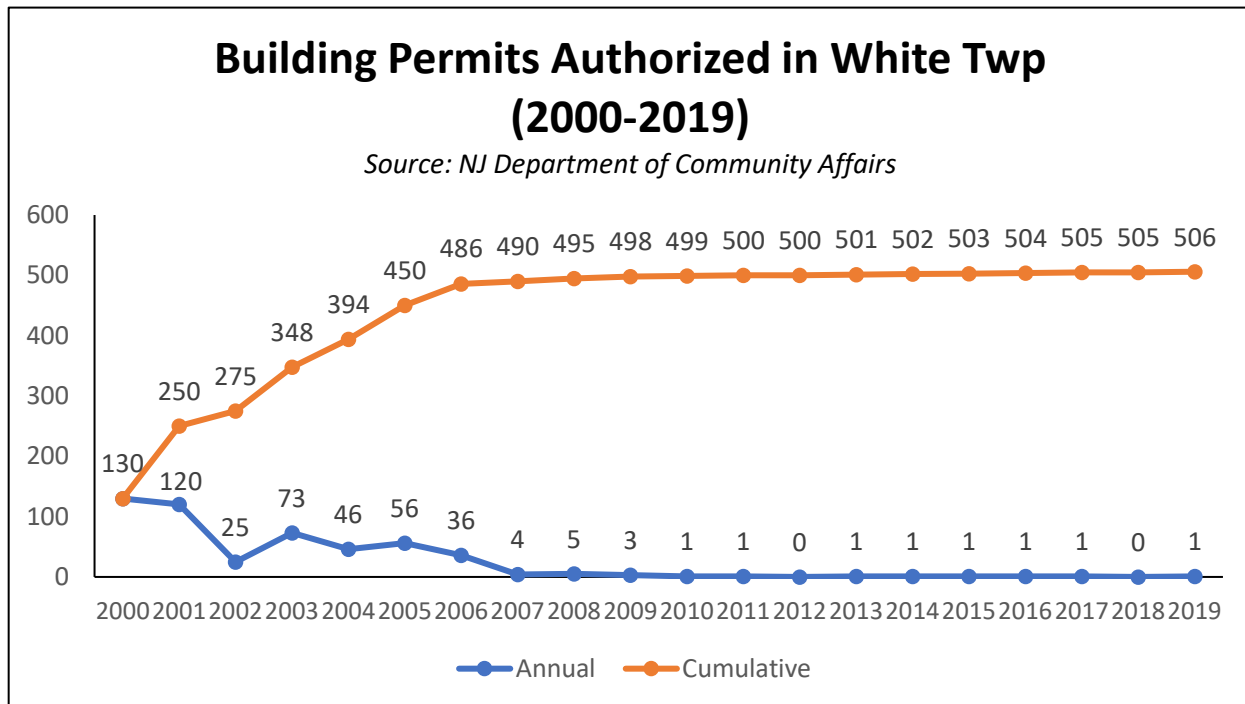


Figure 21. Residential Building Permits in White Township

Table 13. Population of Warren County (2000-2019)		
Year	% Change	Population
2000	-	102,902
2001	2.23%	105,201
2002	1.50%	106,774
2003	1.30%	108,163
2004	0.30%	1084,91
2005	0.34%	108,855
2006	0.19%	109,059
2007	0.11%	109,179
2008	0.66%	109,897
2009	-0.24%	109,638
2010	-0.94%	108,605
2011	-0.36%	108,218
2012	-0.45%	107,733
2013	-0.53%	107,157
2014	0.19%	107,358
2015	-0.07%	107,282
2016	-0.41%	106,845
2017	-0.04%	106,798
2018	-0.47%	106,293
2019	-0.97%	105,267

Source: U.S. Census Bureau

From the perspective of land values, there has been a general trend downward in the per-acre easement values paid to preserved farms, to their 2008 levels. From the 2001 to 2004 period, the average value paid per acre was \$5,500, which fell to \$5,267 from 2009 to 2012. It has since dropped to \$4,573 from 2017-2020. Between 2001 and 2019, the average easement values have remained relatively constant, but begun to decline after 2016. **(Figure 22)**

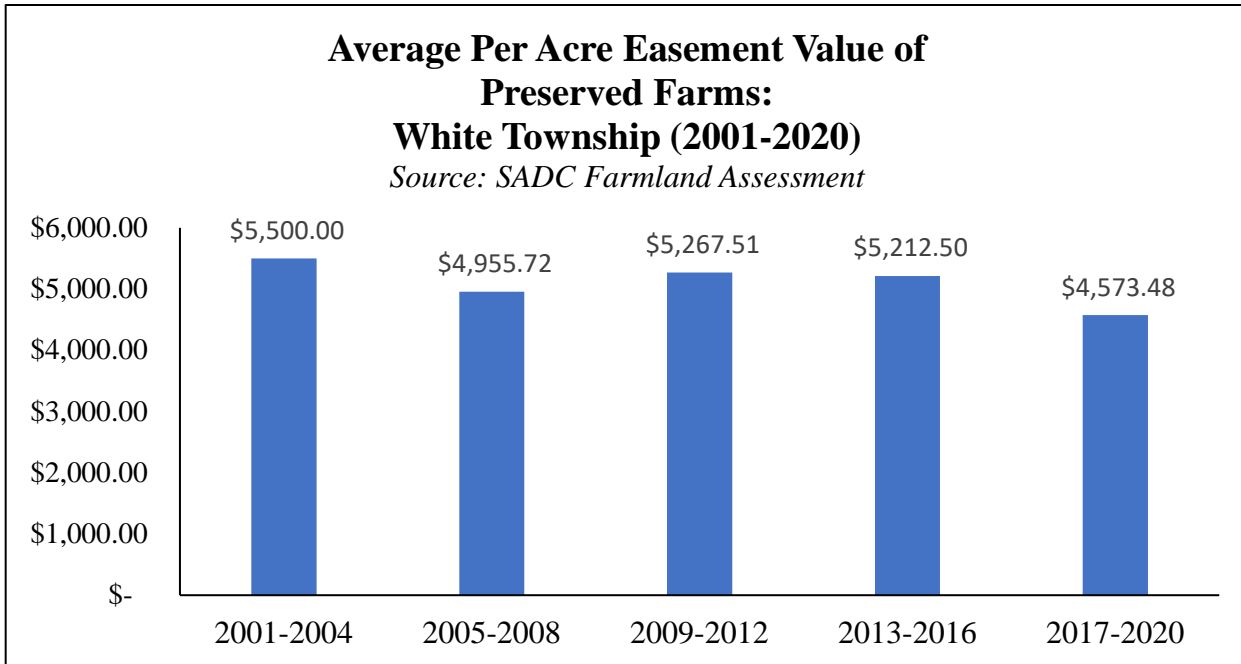


Figure 22. Per Acre Easement Value of Preserved Farms in White Township

G. Density Transfer Opportunities

One program White might consider is the *intra-municipal* TDR in which sending and receiving areas are located within the same town. Alternatively, *inter-municipal* TDR programs establish sending areas in one municipality and receiving areas in another. Some form of tax-based revenue sharing may be necessary with inter-municipal TDR programs.

Regional programs are an alternative that may be proposed at the regional or state level, such as the program introduced as part of the Highlands Regional Master Plan. The New Jersey TDR Bank and the Office of Planning Advocacy (Smart Growth) are facilitating TDR activities statewide. They offer Planning Assistance Grants and technical assistance to municipalities looking to establish municipal TDR programs and may provide funds for the purchase of development credits. The State TDR Bank will also provide financial backing on loans secured using development credits as collateral and keep records of all development credit transfers within the State. White Township may benefit from participating in a TDR program, primarily as a municipality with sending areas.

Non-contiguous cluster zoning is a planning technique that allows one parcel to be preserved while its density is transferred and developed instead on a different, noncontiguous parcel. This technique, first authorized in 1996, allows a municipality to approve “planned developments” consisting of two different parcels, where the “sending area” parcel is preserved, for example, as farmland or open space, and the “receiving area” parcel is developed at a higher than otherwise normally permitted density. Non-contiguous cluster zoning is not currently used in White Township, where there is minimal opportunity for new development in the higher density zones

that accommodate residential development. White Township if a municipal TDR program is put in place.

The general sentiment in White regarding density transfer programs is that management of such a program on the local level is beyond the capacity of the municipal government.



Chapter 4. Farmland Preservation Program

There are **9,032 acres** of farm-assessed land in White Township, including **5,190 acres** devoted to active agricultural use.³ (**Inventory Table 1** and **Map 1**) Farms in the Township have been preserved using a variety of programs, and the town remains firmly committed to farmland protection.

A. Warren County Agricultural Development Areas (ADAs)

1. Statutory and County Criteria

The Warren County Agriculture Development Board (CADB) developed the Warren County Agricultural Development Area (ADA) based upon both statutory and county criteria. The ADA designates land that has the potential for long-term agricultural viability. ADA agricultural use would be the preferred, but not the exclusive, use.

- The land must be agriculturally productive or have future production potential. Also, zoning for the land must permit agriculture, or permit it as a nonconforming use.
- Suburban and/or commercial development must be reasonably non-existent in the proposed ADA area.
- The land must comprise no greater than 90% of the agricultural land mass of the County.
- Any attributes deemed appropriate by the Board must also be incorporated.

Prior to 2008, the entire County had been designated as the Agricultural Development Area (ADA), with the exceptions of Hackettstown, Belvidere, Philipsburg, and Washington Borough. As part of the *2008 Comprehensive Farmland Preservation Plan*, the CADB updated the ADA using the following criteria:

³ *Note:* These numbers are determined by GIS parcel data analysis and thus differ slightly from the Farmland Assessment statistics referenced in Chapters 1 and 2, which derive from reports compiled by the New Jersey Division of Taxation based on filings from Township tax assessor.

- Land is currently in agricultural production or has strong potential for agricultural production, or is farm assessed through a woodland management plan.
- Agriculture is the preferred, but not necessarily the exclusive use.
- Agriculture is a use permitted by current municipal zoning ordinance or is allowed as a non-conforming use.

Utilizing the state’s regulatory criteria for designating ADA and existing farmland assessment data, the County designated an ADA on a county-wide basis that does not exceed 90% of the County’s agricultural land base. Beginning in 2011, the Warren County Department of Land Preservation and the CADB amended the ADA to include farmland who owners had expressed interest in preserving their property, but the land had not been included in the 2008 ADA. This was summarized in the *2017 Farmland Plan Update*. There were no changes to White’s ADA.

2. Agricultural Development Area – White Township

Overall, there are **9,032 acres** of farm assessed parcels in White Township. Of this, **8,748 acres** (97%) of farm assessed land in White is included within the Warren County ADA. All lands in White Township are included in the Warren County ADA except for a small portion in the northwest above Belvidere Township and a section of the Pequest MWA in the northeast of the Township.

Map 1 and **Map 2** show the farm assessed lands in the Township, including all preserved farms. A map of the location of the ADA in White is included within **Map 4**. The West Project Area, in which White Township is located is shown on **Map 5**.

B. Farmland Preserved to Date by Program

As of May 2021, there are **32 farms, totaling 1,900 acres**, preserved in White Township, at an average cost of \$6,527 per acre. White has contributed the balance of the costs, \$713,437, or 6% of the total cost share. (**Table 14**)

- The State of New Jersey, through the State Agriculture Development Committee (SADC), has spent \$8,223,169, or approximately 63% of the total cost share.
- The County has expended a total of \$3,968,055, or 31% of the total cost share.

Eleven projects (38% of the total preserved farmland, 715 acres) in White Township are protected through the County Easement Purchase program. An additional nine farms (31% or 581 acres) were preserved through the County Planning Incentive Grant (PIG) program. Eight farms, totaling 370 acres (19%) were preserved through the Municipal (PIG) program, and four farms totaling 233 acres (12%) were preserved through the Non-profit Grant Program.

Table 14. Preserved Farms in White Township

Farm	Program	Acres	Total Cost	State Cost	County Cost	Municipal Cost	Cost Per Acre	Year Purchased
Schneiber, Harry	Cty EP	32	\$154,612	\$102,285	\$51,988	\$0	\$5,500	2000
Crossroads Farm Polhemus (Hensler)	Cty EP *	108	\$648,762	\$419,402	\$229,360	\$0	\$6,000	2004
Caruso (Hionis)	Cty EP	126	\$673,716	\$673,716	\$0	\$0	\$5,343	2005
Bullock	Cty EP	107	\$392,400	\$255,060	\$137,340	\$0	\$3,850	2005
Enz, Kathleen	Cty EP	39	\$196,836	\$124,158	\$72,678	\$0	\$5,200	2006
Matthews, Ivan	Cty EP	47	\$188,992	\$121,240	\$67,752	\$0	\$5,300	2006
Dunne: Ridge & Valley Conservancy**	NP EP	74	\$180,000	\$90,000	\$70,000	\$16,000	\$3,959	2006
Pequest Development*** (Warren County)	Cty EP	61	\$1,700,000	\$1,000,000	\$700,000	\$0	\$28,044	2006
Supplee, Mildred	Muni PIG	95	\$941,630	\$564,978	\$188,326	\$188,326	\$10,000	2008
Township of White Parks****	Cty EP	44	\$218,836	\$142,473	\$33,012	\$43,350	\$5,038	2008
Duckworth #2*	Cty EP	7*	\$547,400	\$344,080	\$156,146	\$47,174	\$7,000	2008
Pequest	Cty EP	60	\$1,165,475	\$711,169	\$245,150	\$209,155	\$19,807	2009
Matthews	Cty EP	84	\$396,692	\$270,521	\$126,171	\$0	\$4,700	2010
Demeter #1	County PIG	84	\$668,168	\$403,615	\$214,426	\$0	\$8,000	2010
Demeter #2	County PIG	53	\$371,252	\$206,840	\$164,411	\$0	\$7,000	2010
Demeter #3	County PIG	57	\$401,093	\$243,520	\$157,572	\$0	\$7,000	2010
Martin	County PIG	85	\$431,530	\$215,765	\$215,765	\$0	\$5,000	2013
Erhardt	Muni PIG	26	\$189,964	\$118,728	\$35,618	\$27,703	\$7,200	2014
Bullock Estate	County PIG	60	\$234,549	\$164,786	\$69,763	\$0	\$3,900	2015
Walburn	Muni PIG	23	\$138,349	\$90,278	\$24,035	\$24,035	\$5,900	2015
Thompson	County PIG	35	\$124,635	\$88,629	\$18,002	\$18,002	\$3,600	2016

Table 14. Preserved Farms in White Township

Farm	Program	Acres	Total Cost	State Cost	County Cost	Municipal Cost	Cost Per Acre	Year Purchased
Twin Brook	Muni PIG	22	\$142,269	\$90,535	\$25,867	\$25,867	\$6,600	2016
Bartha	County PIG	24	\$106,308	\$73,234	\$33,073	\$0	\$4,500	2017
Race	County PIG	86	\$487,726	\$320,872	\$166,853	\$0	\$5,700	2017
Rothman	Muni PIG	48	\$193,148	\$135,203	\$28,972	\$28,972	\$4,000	2017
DeBoer	Muni PIG	53	\$270,560	\$183,025	\$43,767	\$43,767	\$5,100	2018
Unangst	County PIG	84	\$305,648	\$216,405	\$88,243	\$0	\$3,625	2019
Shoemaker I	NP EP	111	\$627,963	\$313,981	\$313,981	\$0	\$5,650	2019
Shoemaker II	NP EP	12	\$60,050	\$30,025	\$30,025	\$0	\$5,000	2019
Hensler	NP EP	36	\$132,082	\$66,041	\$66,041	\$0	\$3,700	2019
Hoffmann-LaRoche	County PIG	97	\$472,851	\$319,870	\$152,981	\$0	\$5,100	2021
Total:		1,900	\$12,968,054	\$8,223,169	\$3,968,055	\$713,437	\$6,527	
<i>*Duckworth #2 has its main portion in Hope Township with 6.74 acres located in White Township.</i>								
<i>Sources: SADC and Warren County Department of Land Preservation</i>								

Muni PIG: Municipal Planning Incentive Grant program
 County PIG: County Planning Incentive Grant program
 County EP: County Easement Purchase program
 SADC Direct: State Direct program
 NP-EP: Non-Profit Easement Purchase program

Since the completion of the *2010 Farmland Plan*, **21 farms** have been preserved. Three farms were preserved with the County Easement Purchase program, nine farms were preserved through the County PIG, six were preserved using the Municipal PIG, and three were preserved with the Non-profit Easement Purchase program. A total of **1,146** additional acres of farmland have been preserved since 2010.

As of September 2021, there are **three farms pending preservation** in White Township: one through County PIG, one through Municipal Purchase, and another through Non-profit Easement.

1. County Easement Purchase

County Easement Purchases (CEP) involve the sale of farmland development rights to the county by the landowner. To be eligible for the County Easement Purchase program, the land must be in the ADA and be eligible for farmland assessment. In White Township, eleven farms have been preserved through the County Easement Purchase program, protecting 714 acres of farmland.

2. County Planning Incentive Grants

The goal of County Planning Incentive Grants (PIGs) is to protect and preserve large pieces of contiguous farmland through the purchase of development easements. Warren County completed their *2008 Comprehensive Farmland Preservation Plan* to bring it into compliance for the County Planning Incentive Grant program. In White Township, nine farms have been preserved through the County PIG program, protecting 581 acres of farmland. (**Table 15**)

Farm	Acres	Total Cost	Year
Demeter #1	84	\$668,168	2010
Demeter #2	53	\$371,252	2010
Demeter #3	57	\$401,093	2010
Martin	85	\$431,530	2013
Bullock Estate	60	\$234,549	2015
Thompson	35	\$124,635	2016
Bartha	24	\$106,308	2017
Race	86	\$487,726	2017
Hoffmann-LaRoche	97	\$472,851	2021
Total County PIG	581	\$3,298,112	

3. Municipal Planning Incentive Grants

Municipal Planning Incentive Grants (PIGs) are similar to the County PIGs in their goals, requirements, and implementation. Like the County PIGs, Municipal PIGs require a local financial commitment for preserving farmland. To qualify for this program, the municipality must have an agricultural advisory board and a source of funding for farmland preservation. Farms to be preserved through a municipal PIG need to be approved by the CADB. As part of a municipal PIG, the SADC funds 60% of the development easement purchase with the County and the municipality splitting the remaining cost.

White Township is currently enrolled in the Municipal Planning Incentive Grant program. The Township preserved its first farm under the PIG program in 2008. As of May 2021, eight farms in White, totaling 370 acres, have been preserved through this program. (**Table 16**)

Table 16. Total Municipal PIGs in White			
Farm	Acres	Total Cost	Year
Supplee	95	\$941,630	2008
Township of White	19	\$204,558	2008
Erhardt	26	\$189,964	2014
Walburn	23	\$138,349	2015
Twin Brook	22	\$142,269	2016
Rothman	48	\$193,148	2017
DeBoer	53	\$270,560	2018
Unangst	84	\$305,648	2019
Total Muni PIG	370	\$2,386,126	

4. SADC Direct Easement Purchase

The SADC Direct Easement Purchase is a program that allows a landowner to apply directly to the SADC for the sale of development rights. In most cases, the State will pay up to 100% of the certified appraised easement value in the direct easement purchase program. The Direct Easement Program does not usually receive monetary contributions from the County or municipality. In White, no farms have been preserved under the SADC Direct Easement Purchase program.

5. SADC Fee Simple

A fee simple acquisition involves an entire property being purchased directly by the state. The SADC pays the survey and title costs, the landowner is exempt from paying rollback taxes for farmland assessment, and the transaction can be completed in a matter of months. The property is then resold at auction, and the SADC does not retain ownership. No farms in White have been preserved through this program.

6. Non-profit Grant Program

Grants from the SADC to non-profit organization fund up to 50% of the fee simple or development easement values on farms. This program was used to preserve four farms for a total of 233 acres in White. (Table 17)

Table 17. Non-Profit Farms in White Township			
Farm	Acres	Total Cost	Year
Dunne	74	\$180,000	2006
Shoemaker I	111	\$627,963	2019
Shoemaker II	12	\$60,050	2019
Hensler	36	\$132,082	2019
Total Non-profit	233	\$1,000,095	

7. Transfer of Development Rights

TDR is a growth management tool that transfers development rights from one location, a sending or preservation area, to another, an identified growth or receiving area. To date, this program has not been used by White Township to preserve farmland.

8. Other Programs and Partnerships

The Highlands Development Credit Banks. The HWPPA charged the Highlands Council with developing a TDR program for the Highlands Region. The Highlands Council adopted the TDR Program as part of the RMP and established the Highlands Development Credit Bank (HDC Bank) in June 2008 in support of the TDR Program. This program serves as one mechanism to address some of the equity concerns of property owners in the Preservation Area that have been affected by implementation of the Highlands Act.

The Highlands TDR Program allocates TDR credits called Highlands Development Credits or HDCs to sending zone property owners. HDCs may be sold to developers for use in appropriate voluntary receiving zones. Use of HDCs by developers in established receiving zones will permit developers to increase the density or intensity of proposed projects in those zones. Under the Highlands Act, participation as a receiving zone is voluntary.

Five properties (145 acres) in White Township are registered on the Highlands Development Credit Bank’s registry. This signifies that these parcels have HDCs and are preserved through a conservation easement held by the state.²³ (**Table 18**)

Table 18. HDC Properties in White Township					
HDC Certificate Number	Property Owner at time of HDC Purchase	Block	Lot(s)	HDC Easement Recorded	Acres
2011-0002	Mari A. Accetturo	16	45	5/3/2011	18.29
2013-0006	David Newhouse	16	24, 24.15	9/26/2013	14.5
2017-0013	Alex Zikas	68	59	11/29/2017	19.34
2018-0004	David Newhouse	13	21	3/19/2018	30.74
2020-0005	Albert Jarvis	14	17	6/30/2020	62
Total:					144.87

C. Term Farmland Preservation Programs

The Term Farmland Preservation Programs are cost sharing programs for soil and water conservation projects, in which the farmer receives up to 50% of the costs for these projects, as well as protection against nuisance complaints, emergency fuel and water rationing, zoning changes and eminent domain actions. In return, the farmer signs an agreement that restricts the land to agricultural use for either eight years or sixteen years. For entrance into these programs

and to qualify for benefits, a farm must be located within the county ADA. Technical assistance for the soil and water practices comes through the NRCS.

In White Township, no farms currently participate in the term programs.

D. Coordination with Open Space Preservation Initiatives

Farmland preservation and the identification of targeted farms should be coordinated with open space planning efforts. Trail easements and adjacency to proposed and existing active recreational facilities are potential areas of concern for farmers. White has a Municipal Farmland Preservation and Open Space Trust Fund, which is used to preserve farmland and open space. Members of the AAC who are actively engaged in farming may serve on the Farmland Preservation and Open Space Advisory Committee, fulfilling a role of the AAC to provide expertise and advice regarding farmland preservation.

E. Farmland Preservation Program Funding Expended to Date by Source

In 1998, White Township residents approved the establishment of the Municipal Farmland Preservation and Open Space Trust Fund at a rate of \$0.02 per \$100 of assessed valuation. The tax rate has been holding steady from 2015 to 2020. The Fund has expended \$1,323,631 since it was established, generated approximately \$111,403 in 2020, and had a balance of \$685,645 as of June 3, 2021.²⁴ **Table 19** details the amount generated per year for the past seven years.

Year	Tax Rate	Amount Generated
2015	\$0.020	\$112,927
2016	\$0.020	\$112,429
2017	\$0.020	\$112,304
2018	\$0.020	\$112,180
2019	\$0.020	\$111,722
2020	\$0.020	\$111,403

The Township has funded its farmland preservation mostly as a direct payment from its Open Space Trust fund. In recent years, the Township borrowed funds for a preservation project and the loan payments were made from the Open Space Trust Fund. There is no bond obligation and no debt.²⁵

F. Monitoring of Preserved Farmland

Warren County monitors the property to verify that compliance with the deed restrictions on the preserved property is taking place. The Township's AAC will notify the Warren CADB if violations are suspected. The Upper Delaware Soil Conservation District performs annual inspections of the preserved farmland property for the Warren CADB. The inspectors take note of the following:

- Change in ownership since the previous inspection
- Evidence of non-agricultural development (approved or otherwise)
- Use of the premises for agricultural activities
- Expansion of non-agricultural activity since the previous inspection
- If the non-agricultural practice has been abandoned
- Evidence of mining or removing of materials such as sand, gravel, rock, etc.
- Evidence of dumping
- Whether or not the farm has an approved conservation plan
- Any improvements to farm buildings and residences
- Any new agricultural buildings erected

G. Coordination with Transfer of Development Rights Programs

TDR may be used in conjunction with the traditional Purchase of Development Rights (PDR) program; these two programs are not mutually exclusive. As previously discussed, White Township is not currently enrolled in or developing a TDR program.



Chapter 5. Future Farmland Preservation

A. Preservation Goals

White Township is 27.9 square miles (17,856 acres) in size. Of this, **9,032 acres (51%)** are under farmland assessment, which includes croplands, woodlands, farm structures and wetlands/waterways that occur on an agricultural property.⁴²⁶

White Township has preserved **1,900 acres** of farmland. (**Table 14**)

Based upon the State’s Minimum Eligibility Criteria for productive soils and tillable land, of the **9,032 acres of farm assessed land** in White Township, there are **3,636 acres, or 49 farms** eligible for preservation. These “targeted” farms are located within the County ADA.

The total amount of land that qualifies for farmland preservation must meet the minimum tillable land requirement, this includes tillable land and woodland. This analysis was done on a farm unit (where a farm consists of a collection of individual lots) and a farm parcel (one lot) basis.

Based upon the available funding to purchase and preserve farmland, and the amount of farmland potentially eligible for preservation, the following preservation goals are identified for White Township:

- One-year target: 100 acres, 1 farm
- Five-year target: 900 acres, 9 farms
- Ten-year target: 2,000 acres, 15 farms

⁴ *Note:* For the ADA and Project Area analyses, the farmland assessed data is derived from the GIS digital data, which is slightly different from that reported for 2019 in the NJ Division of Taxation’s 2019 Farmland Data Report (see *Chapter 1*). Preserved farm acreage for this chapter is also derived from the GIS digital data, which also differs slightly from the historical data on individual farm preservation (see *Chapter 4*).

B. Description of Project Areas

There are **9,032 acres** of farm assessed land in White Township. Of this, **8,748 acres** are included within the County’s ADA. Within the County’s ADA in White Township, **4,955 acres** are in active agriculture. In the *2017 Comprehensive Farmland Preservation Plan*, the Warren CADB identified seven project areas within the County’s ADA for farmland preservation. White Township falls within Project Area West for Warren County. The West Project Area in White includes **8,748 acres** of farm assessed land. (**Table 20**).

Table 20. Project Area West in White

(acres)	Total Farm Assessed Properties	Unpreserved Farmland	Preserved Farm Parcels	Preserved Farm Assessed as Farmland	Active Agriculture	Farm Assessed HDC or Easement
White	9,032	7,041	1,900	1,656	5,190	237
Project Area West	8,748	6,854	1,900	1,656	4,955	237

C. Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC’s rules for farmland preservation and project eligibility.⁵ In order to be eligible for preservation the site must be developable, have soils capable of supporting agricultural or horticultural production, and meet minimum tillable land standards. (N.J.A.C. 2:76-6.20) In summary:

For all lands less than or equal to 10 acres:

- The land must produce at least \$2,500 worth of agricultural or horticultural products annually; and
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be tillable; and
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be capable of supporting agriculture or horticulture; and
- The land in question must exhibit development potential as defined by the SADC (based upon zoning, ability to be subdivided, less than 80% wetlands, less than 80% slopes of 15% or more); or
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

For lands greater than 10 acres:

- At least 50% or a minimum of 25 acres of land (whichever is less) must be tillable; and
- At least 50% or a minimum of 25 acres of land (whichever is less) must have soils capable of supporting agriculture or horticulture; and
- The land in question must exhibit development potential as defined by the SADC; or

⁵ Adopted by the SADC May 21, 2007, and July 25, 2019.

- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

For a farm application to qualify for SADC cost share, the farm must have at least one parcel listed on the targeted farm list; comprise an assemblage of substandard parcels which together meet SADC minimum standards; or have sufficient justification by the municipal AAC and the Warren CADB that the parcels were not identified as targeted due to a specific mapping issue or other error.

The Township may proceed without State funding on projects that do not meet these Minimum Eligibility Standards, but as a rule, the County and White will not cost share on applications that do not meet SADC minimum standards. In all cases, the White Township AAC will work closely with the Warren CADB to review and process applications from landowners for farmland preservation. The White AAC will follow all County and State procedures to ensure consistency in application review and processing.

Within the identified project area, candidate farms are identified which meet the tillable land and soils minimum eligibility standards. To determine farms that are potentially eligible for preservation, a series of queries were made utilizing the ArcGIS 10.8.1 digital mapping software for soils and tillable land. These are described in further detail below and shown on target farm analysis maps, **Map A** (meeting tillable criteria), **Map B** (meeting soils), **Map C** (farms meeting both criteria – target farms).

Farmland that meets the SADC Criteria for Tillable Land

Tillable acreage was determined using the NJDEP 2015 LU/LC mapping for agricultural lands. The land categories that are defined as the “tillable land” based on the 2015 NJDEP LU/LC, are as follows:

- Agricultural Wetlands (Modified)
- Confined Feeding Operations
- Cropland and Pastureland
- Former Agricultural Wetland
- Orchards/Vineyards/Nurseries/Horticultural Areas
- Other Agriculture

Farm parcels were sorted by size based upon the SADC Minimum Eligibility Criteria for tillable land:

<u>Farm Size</u>	<u>Requirements</u>
0-6.667 acres	75% tillable
6.667-10 acres	5 acres tillable
10-50 acres	50% tillable
50+ acres	25 tillable acres

Farms which meet the minimum eligibility criteria for tillable land in White are shown on **Map A**.

Farmland that meets the SADC Criteria for Agricultural Soils

Agricultural soils as defined by the SADC are those soils capable of supporting agricultural or horticultural production. The use of the NRCS Soil Survey identifying prime, statewide and unique agricultural soils is the first and best indication of the farmland soils. The interpretation of the tillable land layer from the NJDEP LU/LC data (including pastureland) is the second screen for soils capable of supporting agriculture with the following provisions:

- It is best to make determination of soils capable of supporting agriculture on a site-specific basis (that is for individual submitted applications);
- For farmland planning, on a municipal and county basis, the tillable land layer can also be used to show general areas of farmland potentially eligible for preservation if it is noted that this picture of farmland would need to be confirmed on an individual basis by studying:
 - ✓ Practices the individual farmer has made to farm the land
 - ✓ Amount and location of steep slopes on the farm
 - ✓ Number of stony/gravelly soils on the farm

The SADC has agreed that soils capable of supporting agricultural production are those classified as agricultural by the NRCS Soil Survey or identified as tillable by the NJDEP Land Cover/Land Use mapping.²⁷

Farm parcels are sorted by size based upon the SADC Minimum Eligibility Criteria for soils:

<u>Farm Size</u>	<u>Requirements</u>
0-6.667 acres	75% soils capable of supporting agricultural production
6.667-10 acres	5 acres of soils capable of supporting agricultural production
10-50 acres	50% soils capable of supporting agricultural production
50+ acres	25 acres of soils capable of supporting agricultural production

Farms in White that meet the NRCS minimum eligibility criteria for soils are shown on **Map B**.

Farmland that meets SADC Criteria for both Tillable Land and Soils

Utilizing the tillable acreage determined from the NJDEP 2015 LU/LC mapping for agricultural lands and soil acreage determined using the Soil Survey as prepared by the NRCS for prime farmland soils, soils of statewide importance and soils of unique importance, farm parcels were sorted on size based upon the SADC Minimum Eligibility Criteria for tillable land and soils.

Overall, there are **3,636 acres, or 49 farms** which meet the minimum eligibility criteria for the state’s farmland preservation program and are located within the ADA. These are the “target farms” for White Township. These are shown on **Map C** and listed in **Inventory Table 2**. In White, this analysis was run on both an individual farm parcel basis and for units of farms (which include a collection of parcels):

- ✓ Farm Parcel: Individual tax lot
- ✓ Farm Unit: Collection of parcels comprising one farm

Based upon the available funding to purchase and preserve farmland, and the amount of farmland potentially eligible for preservation the town has identified the following goals:

One-year target:	100 acres, 1 farm
Five-year target:	900 acres, 9 farms
Ten-year target:	2,000 acres, 15 farms

D. County and Municipal Ranking Criteria

The Warren CADB uses the SADC's ranking criteria as the basis for qualifying farms for preservation. The County would consider cost sharing with the Township on applications that do not meet the SADC minimum standards on applications that have compelling factors including (but not limited to) adjacency to other preserved farms or fit into the plan for the County for farmland preservation.²⁸ In these special cases the CADB may use its own ranking sheet to determine each of the following for individual applicant farms:

- the quality of the local soils
- total tillable acres available
- local buffers and boundaries
- zoning
- County growth and existing infrastructure
- municipal commitment to agriculture
- other financial commitment to agriculture

Points are received in each category relevant to the suitability of the local conditions for agriculture. The higher the score received, the higher the ranking. For the municipal PIG program, the Warren CADB uses the SADC Minimum Eligibility Criteria as the basis for participating with the local municipality.

White's AAC and Township Committee are committed to preserving as much of the Township's agricultural land base as possible and supports innovative funding mechanisms and preservation tools. The focus of the Township's farmland preservation program is to preserve the productive agricultural landscape of the community. White's ranking criteria, in descending order of importance is:

- acreage
- proximity to other preserved farms
- income percentage derived from farming
- proximity to preserved Open Space
- imminence of sale or other extenuating circumstances.

E. Municipal and County Policies Related to Farmland Preservation Applications

White Township follows the policies established by Warren County regarding housing opportunities, division of premises, and exception areas. These policies are documented in the *2017 Warren County Comprehensive Farmland Preservation Plan Update*. The Warren CADB follows the SADC's policies regarding these issues.

1. Approval of Housing Opportunities

Agricultural labor housing: Agricultural labor housing is not currently protected under the Right to Farm Act in the State of New Jersey and the SADC has not, to date, adopted an official policy for agricultural labor housing.²⁹ However, the SADC recognizes the need for this type of housing and does have guidelines that a landowner must refer to construct labor housing on preserved farms for work on the preserved farm.

The guidelines are:

- Agricultural labor housing must be permitted with approval of easement holder and the SADC.
- Must verify need for “production” aspects of farm.
- Must be full time employed on the premises (seasonal labor is permitted).
- Structure must be sized appropriately based on labor needs.
- Cannot be used for owner or any lineal descendent of owner.³⁰

House replacement: The policy of the SADC on house replacement is that requests for replacement of a residence on permanently preserved land must be reviewed and approved on an individual basis by the CADB and the SADC, to minimize the impact on the agricultural operation. This is supported by the CADB and AAC for White Township.³¹

Residual dwelling site opportunity allocation: Residual Dwelling Site Opportunities (RDSOs) are lingering potential housing prospects located within a deed-restricted farm. By designating an area as an RDSO, the landowner is implying that the land will be used for a residential unit or other structure as referred to in N.J.A.C. 2:76-6.17. The maximum RDSO density is one residence per 100 acres. The purpose of the building in question must be for “single-family residential housing and its appurtenant uses.”³² To qualify as an RDSO, the SADC requires that the use of the residential unit be for agricultural purposes and “at least one person residing in the residential unit shall be regularly engaged in common farm site practices.” This is supported by the AAC and Warren CADB. RDSO units must be requested at the time of application and approved by the WCADB and SADC prior to closing according to SADC Policy P-31.

2. Division of the Premises

The goal of the SADC, supported by the Warren CADB and White Township AAC, is to preserve large tracts of farmland. The division of the premises by way of subdivision may

significantly alter the potential use of the preserved land. Therefore, a division of the premises is not an encouraged practice; however, when division occurs it must be for agricultural purposes and must result in agriculturally viable land parcels. A landowner wishing to divide permanently preserved farmland must submit a written request. The application must be approved, in writing, by both the SADC and the CADB.

3. Approval of Exception

Exceptions are defined by the SADC as “acres within a farm being preserved” which are “not subject to the terms of the deed of easement.” When an exception is made, the landowner does not receive any compensation in the excepted area. The SADC discourages the preservation of farms that do not have at least one exception, and it is important to take the number, size, location, and purpose of the exception into consideration. Exceptions may be granted in some circumstances, especially in the case of non-severable exceptions, or where the exception might be justified (e.g., to allow for the expansion of pre-existing non-agricultural uses, for trail easements, etc.). It is critical to make decisions about exceptions at the time of application, as exceptions cannot be granted, expanded, or moved once the farm has been preserved. There are two types of exceptions that can occur: severable and non-severable.

Severable: A severable exception is defined by the SADC as an “area that is part of an existing Block and Lot owned by the applicant which will be excluded from the restrictions of the Deed of Easement and may be sold as a separate lot in the future.”³³ Typically, there is “no requirement to subdivide a severable exception prior to or after the deed of easement is executed.”

Non-severable: Non-severable exceptions are defined by the SADC as “area that is part of an existing Block and Lot owned by the applicant, which will not be subject to the restrictions of the Deed of Easement but cannot be sold separately from the remaining premises.”³⁴

Exceptions made to farmland have the potential to impact the value of the property. When an appraisal occurs, both severable and non-severable exceptions are considered in the determination of the restricted/after value of the property. The Warren CADB and White Township AAC follow the exception policies as identified by the SADC. The AAC will work with applicants to the municipal PIG program to minimize the impacts of exception requests on the agricultural operation to the greatest extent possible.

F. Funding Plan

The *Preserve New Jersey Act 2014* established that a portion of the Corporate Business Tax was to be dedicated to preservation efforts. Of this revenue, 60% is allotted to Green Acres, 4% goes to Blue Acres (administered by Green Acres), 31% is set aside for farmland preservation (SADC), and the remaining 5% goes to Historic Preservation (New Jersey Historic Trust).

1. Municipal and County Funding Sources

The Warren County Land Preservation Department is responsible for administering Warren County's Farmland, Historic, and Open Space Preservation Programs. In 1993, Warren County voters approved a non-binding public referendum by a margin of 2-1 which allowed for the collection of an additional tax of up to 2 cents per \$100 of assessed valuation. In November 1999 and again in November 2002, county voters approved non-binding open space referendums by large margins, each time recommending an increase in the open space tax of another 2 cents per \$100 of assessed property value.

The Open Space Trust Fund, which currently collects 2 cents per \$100 of assessed property value, has enabled Warren County to preserve over 20,000 acres of farmland, 1,700 acres of county parkland, and participate in numerous historical and open space preservation efforts with local non-profits and municipalities throughout the county.³⁵The funds are allocated as follows:

- 55% to the CADB for farmland preservation.
- 25% to the Municipal and Charitable Conservancy Trust Fund Committee (MCCT) for non-profit and municipal sponsored open space and historic preservation projects.
- 20% to the Board of Recreation Commissioners (BORC) for acquisition of county parkland.

In 1998, White Township residents approved the establishment of the Municipal Farmland Preservation and Open Space Trust Fund at a rate of \$0.02 per \$100 of assessed valuation. The tax rate has been holding steady from 2015 to 2020. The Fund has expended \$1,323,631 since it was established, generated approximately \$111,403 in 2020, and had a balance of \$685,645 as of June 3, 2021.

2. Financial Policies – Cost-Share Requirements

White Township works with Warren County according to its current cost-share requirements for preserving farms. The Warren CADB will fund one-half of the difference between the amount the SADC funds and the total cost for preserving a farm, based upon the Certified Market Value (CMV), through the municipal Planning Incentive Grant program. The remainder is funded by the municipality.

White Township is supportive of donation/bargain sales and installment purchases. Both tools serve to leverage limited funding resources.

Donation and Bargain Sale: This mechanism for preserving a farm involves donation by the landowner. If the landowner donates a portion of the value of the development rights when an easement is sold, this is called a bargain sale. A bargain sale can result in substantial tax savings for the landowner and can stretch farmland preservation funds. The landowner donation is a reduction in the amount of gain that is subject to the capital gains tax, and the landowner can take a tax deduction for the amount donated against his or her federal and state income taxes.

Installment Purchase: Through an installment purchase agreement, development rights may be acquired by the Warren CADB through a payment plan that provides payments to the landowner over time. Receiving the income from the sale in installments may provide the landowner with fiscal management and/or tax advantages.

3. Cost Projections and Funding Plan Associated with Preservation Goals

The White Township Trust Fund generates \$111,403 per year and has a current balance of \$685,645. The average cost was \$6,527 per acre to purchase a development easement on farms in the municipality. However, the cost of land has risen since the earliest acquisitions were made, affecting the cost per acre for future acquisitions. The Township looks to leverage the municipal funds with county and state cost-share grants on farmland projects. It is anticipated that the municipal cost share will average 15% (at a minimum). The following assumptions can be made:

- The Trust Fund generates \$111,403 per year.
- Average price per acre is \$6,527.
- The average price per acre will increase 5% over the next five to ten years.
- The Township is purchasing land in partnership with County and State (no direct purchase by Township).
- The municipal cost share is on average 15%.

Based upon the above assumptions and the AAC's goal of preservation fifteen farms (2,000 acres) in the next ten years, it is anticipated that the Township will have a total project cost of \$13,054,000 and contribute \$1,958,100 over the same time, if their percent contribution remains at 15%.

Utilizing the SADC sliding scale for cost-sharing, and the estimated per acre value of the purchase of a farmland easement in White Township, it is likely that the state will contribute approximately 60% of the funding on a municipal PIG project with the County and Township contributing the remaining 40% (split equally, 20% and 20%).

G. Administrative Resources

1. Staff/Consultant resources

The Township of White has an AAC that meets as needed to discuss farmland projects and issues. With the Open Space Committee, the AAC developed the Township's *2010 Farmland Preservation Plan* and administers the program for the municipality. The Land Conservancy of New Jersey assist White Township with its farmland preservation program.

2. Legal support

Legal support for White Township's farmland preservation program is provided by the municipal attorney, up to the point of contract signature, after which the county attorney is used.

3. Database Development

The AAC maintains the database of farmland in the municipality and works with the Warren County Department of Land Preservation on projects and data issues, as needed.

4. Geographic Information System (GIS) Capacity

The Land Conservancy of New Jersey has provided Geographic Information System mapping services for White Township for the *Comprehensive Farmland Preservation Plan Update*.

H. Factors Limiting Farmland Preservation Implementation

White Township has a strong commitment to preserve its farmland. The high rate of farmland preservation in White Township has been attributable to the willingness and the ability of the Township to leverage its own funding to protect farmland. White Township strongly supports the municipal PIG program. White Township's program faces financial challenges as it moves forward in purchasing and preserving land during the next ten years.

Landowner interest in the farmland preservation program continues to be a challenge for the AAC in attracting new projects.



Chapter 6. Economic Development

A. Economic Development Plans and Initiatives

White continues to be mainly agricultural, with **8,285 acres of land for agricultural use or horticultural use**.³⁶ The primary crops are hay, corn, and soybeans. The farmland preservation program is a critical component of the farming industry, and the success of the farmland preservation program in White is measured not by acres preserved but also by the programs put in place to support the farmers and their businesses. To be a full partner in a successful farmland preservation program, agriculture as an industry must be vibrant, self-sustaining, and innovative.

The future of agriculture in White Township is being shaped by market forces and social trends that are occurring throughout New Jersey. Among the most substantial trends shaping local agriculture has been the decline in the dairy market. Dairy was the foundation of the region's agricultural industry, but the lack of support and demand, combined with the amount of labor involved, contributed to the decline of the industry. Corn, soybeans, and hay are the primary crops, and farms that supported the dairy industry have moved toward different agricultural activities, such as agritourism and produce crops.

Land prices in Warren County have remained relatively stable for the past 5 to 10 years, though there has been recent development pressure from warehouse and solar projects. Development continues for commercial and light industrial purposes (especially warehouse development) and can take land out of agricultural production.³⁷ White Township government is aware of this potential pressure and has established methods to limit development through its planning initiatives and zoning regulations.

The combination of declining traditional agricultural markets and increasing land pressure will likely promote innovation in the ways farmers supplement their incomes. Farmers in Warren County are meeting these challenges by producing goods with higher rates of return. As traditional farming practices become less economically feasible, these initiatives are going to be important for White farmers.

The NJDA *Smart Growth Tool Kit* provides information to support municipal and county government, businesses, non-profit groups, and local citizens in their efforts to achieve the goals

and objectives outlined in the NJDA *Agricultural Smart Growth Plan for New Jersey, 2006*.^{38, 39} The Tool Kit embraces the five linked components that have been identified by NJDA as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation. Additionally, the NJDA released a *2011 Economic Development Strategies* report to expand and strengthen various sectors of the agriculture industry in New Jersey, including strategies for produce, horticulture, dairy, livestock and poultry, field crops, organic, equine, and agritourism.

The Warren CADB and its Department of Land Preservation are directly and administratively involved with the preservation and enhancement of farming in the County. This includes acquisition, monitoring, assisting with Right to Farm disputes, working with municipalities to create farm-friendly atmospheres where possible, and coordinating with the state, County, and other organizations to maximize the agricultural potential of the County, including an awareness of the need to support agriculture from an economic development perspective.⁴⁰

In 2017, 86 of Warren County’s 918 farms, or 9% of all farms, had sales of more than \$100,000, accounting for 92% of the total revenue. This leaves 91% of farms accounting for 8% of the remaining total sales, indicating a wide disparity in revenue between a large majority of smaller farms and a small minority of larger farms. From a profitability standpoint Warren County farms had a net cash farm income of \$21,227 in 2017. The average farm market value of \$101,543, was lower than the statewide average of \$111,095.⁶ (**Table 21**)

Table 21. Warren County Agricultural Economic Overview			
	2007	2017	% Change to 2017
Market Value/Products Sold (\$1,000)	\$75,477	\$93,217	24%
Average/Farm (\$)	\$80,897	\$101,543	26%
Production Expenses (\$1,000)	\$59,355	\$77,551	31%
Average/Farm (\$)	\$63,617	\$84,478	33%
Net Income (\$1,000)	\$20,843	\$21,227	2%
Average/Farm (\$)	\$22,340	\$26,650	19%
Farms w/Net Gains	358	309	-14%
Average/Farms (\$)	76,983	101,820	32%
% of All of Farms	38%	34%	-11%
Farms w/Net Losses	575	609	6%
Average/Farm (\$)	11,682	16,807	44%
% of All of Farms	62%	66%	6%

⁶ Census of Agriculture data is available through the USDA NASS portal: <https://www.nass.usda.gov/AgCensus/index.php> or through specialized searches on the Quick Stats interface accessed here: <https://quickstats.nass.usda.gov/>. Citations throughout this document refer to information gathered from these sources for the indicated years.

Table 21. Warren County Agricultural Economic Overview

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Total Acres	74,975	73,874	-1%
All Farms	933	918	-2%
Average Acres/Farm	80	80	0%
<i>Source: Census of Agriculture</i>			

Using the *Census of Agriculture*, crop sales climbed slowly from \$8.3 million in 1987 to \$18.4 million in 2002, before jumping to \$43.6 million in 2007 and continuing to climb to \$54.7 million in 2012 and to \$67.1 million in 2017. Within the crop sector, nursery/greenhouse was the largest sub-sector in 2017 with 61% of the market share, more than the 46% market share in 2012. The grains sub-sector came in second, with 21%, and vegetables, fruits, hay, and Christmas trees all lagged with 10%, 4%, 4%, and 1%, respectively. Over this same 30-year period (1987-2017), livestock sales went from \$27 million in sales in 1987 before slightly improving to \$31.9 million in 2007 then declining to \$26 million in 2017.

As part of this emphasis on the business of agriculture, the NJDA issued the *2011 Economic Development Strategies*, which identify and propose methods to expand and enhance various subsets of the agriculture industry in New Jersey, including produce, horticulture, aquaculture and seafood, dairy, field and forage crops, livestock and poultry, organic, wine, and agritourism. The NJDA observes that “local access to large affluent markets has long been an advantage for the marketing of [those] products. While our markets are still there, competition has become tougher. New Jersey...must continually work to rediscover its competitive advantages, improving access to nearby markets and strengthening consumer loyalty.”⁴¹

Using recommendations outlined in the *2011 Economic Development Strategies* report, Warren County municipalities, including White Township, can investigate ways to expand and/or diversify into more profitable sectors to ensure sustainable agriculture practices and profitability. For each of the sectors, the 2011 report encourages farmers to continually seek new local, state, and interstate markets to strengthen market share. White had 191 Farmland Assessment forms for 2017.⁴²⁷

Produce

Major efforts by the NJDA are directed at increasing the demand for New Jersey grown produce through branding, agritourism, farm direct sales programs, and farm markets. The NJDA *2011 Economic Development Strategies* include all these activities. NJDA is committed to promoting agritourism through the *Jersey Fresh* website, the distribution of printed materials, and other forms of advertisement and promotion including collaborating with Rutgers University through the New Jersey Agricultural Experiment Station (NJAES-RCE), and promotion of the work of other organizations such as the New Jersey Farmers Direct Marketing Association. White farms with appropriate activities benefit from such promotion.

⁷ Farmland Assessment data has been accessed from datasets shared by the State Agricultural Development Committee; data referenced as Farmland Assessment refers to data from the following reports: either Warren County data for the years 2000, 2005, 2015, and 2017, and/or for state data for 2017.

The NJDA 2011 *Economic Development Strategies* for produce focused on the *Jersey Fresh* program and food safety. NJDA's *Jersey Fresh* labels program is promoted throughout the state, to strengthen the appeal of the *Jersey Fresh* brand to supermarket chains and other retailers. This has been largely successful, with major retailers such as Wegmans, ShopRite, Trader Joe's, Target, ACME, and Foodtown (among others) carrying and promoting produce from the *Jersey Fresh* program.⁴³

Produce, which includes vegetables and fruits, is a leading agricultural commodity in New Jersey. In 2017, Warren County vegetable growers on 94 farms harvested 1,671 acres, with resulting sales of \$6,388,000. Fruit, tree nut, and berry combined sales totaled \$2,601,000 in 2017, an increase of 16% from 2012. Total produce sales increased after 2002, from \$5,324,000 in 2002 to \$8,989,000 in 2017, a 69% increase.

White had a total of 201 acres harvested for fruits and vegetables in 2017, a slight increase from the 191 acres in 2015, and the 189 acres in 2005. Some of these crops do not require as much land as field and forage crops such as soybeans and hay, making them a positive match with the trend towards smaller farms over the years, especially those that follow organic or sustainable practices. However, these crops also have higher input costs than crops such as hay, and in that respect can benefit from economies of scale.

Farmers with roadside stands or markets should have their own websites, and utilize other websites and regional events, to gain visibility. Opportunities for promoting produce (and, in many cases, numerous other agricultural products) include:⁸

- NJDA *Jersey Fresh*⁴⁴ website listings have recorded five White Township farms, including H.A. Race & Son—pick your own; Hensler Farms—on farm market; Mackey's Orchard—on farm market, pick your own; Wycoff's Christmas Tree Farm—on farm market, pick your own; and Stoneyfield Orchard—on farm market, pick your own.
- *Jersey Fresh* also offers community-supported agriculture (CSA), where residents can pledge to support a farm in advance of the growing season, where they receive shares of the total harvest in return. Genesis Farms in nearby Frelinghuysen is a community supported farm.⁴⁵
- *Rutgers New Jersey Agricultural Experiment Station Cooperative Extension (NJAES-RCE)* created an educational website dedicated to agritourism for the public, planning and policy professionals, farmers, and educators.⁴⁶
- A training website was also developed by the Rutgers Agritourism Team for farmers and can be found at <http://agritourism.rutgers.edu/training/>.
- *New Jersey Skylands* promotes agritourism throughout Warren County, offering descriptions of the Warren County Farmers Fair, wineries, farmers markets, and other attractions. The website offers a comprehensive list of different types of produce

⁸ These websites are not meant to exclusively promote produce-centric farms, but rather to highlight various farms and events throughout Warren County, including White.

available and the best time to attend pick-your-own operations for each produce category.⁴⁷

- *Natural Jersey* is a site promoting local natural health products and sustainable living. They highlight producers, such as farms, farm stands, and farmers markets throughout New Jersey which align with their mission, including and nearby farms and vineyards. Kimball's Farm in White Township is listed on Natural Jersey.⁴⁸
- *Tour de Farm New Jersey* holds an annual cycling event in both Sussex and Warren Counties, with the goal of supporting local farmers. Farmers provide samples, as well as goods for sale along the route.⁴⁹
- *Warren County Farmers Fair* is a weeklong festival in nearby Harmony featuring many local farms offering products for sale, as well as hot air balloons, artwork and other attractions.⁵⁰
- *Greenmarket* is a network of New York City farmers markets designed to promote small family farms within the region. Over 50 Greenmarket locations are found within all five boroughs. This is an opportunity for White Township Farms to sell directly to customers.⁵¹
- Other resources listing direct marketing opportunities for produce in White include VisitNJfarms.org, NJ Farmers Direct Marketing Association (<http://njfarmmarkets.org/>), Northeast Organic Farming Association New Jersey (<http://nofanj.org>), LocalHarvest.org, and EdibleJersey.com (pick-your-own listings).

Specific recommendations include:

- Utilize consistent, inclusive, and up to date accurate information from the state, county, and regional/association websites.
- Establish or reestablish community farmers markets with help from the CADB, the NJAES-RCE, and the Warren County Economic Development Advisory Council.
- Explore expansion/diversification into value-added produce products, such as jams and jellies, in workshops and direct communications from the CADB in concert with the NJDA and Rutgers.
- Explore "Contract Growing," that is, growing goods for specific customers on a contract basis (such as regional pharmaceutical or biotech companies).
- Explore diversifying into ultra-niche crops and produce crops that serve the needs of growing ethnic populations in the region, through NJAES-RCE workshops, videos, and resources: <https://njaes.rutgers.edu/ultra-niche-crops/>,⁵² <https://sustainable-farming.rutgers.edu/alternative-world-crops/>.⁵³
- Utilize state promotional campaigns, free signage, and other signage opportunities.
- Offer Community Supported Agriculture and other retail options to capture consumer dollars to garner increase from profitability, as well as raise community awareness of local agriculture.

Nursery, Greenhouses, Floriculture and Sod

The NJDA 2011 *Economic Development Strategies* focused on ensuring plant health, including inspections and research; increasing consumer awareness of the *Jersey Grown* brand; and working with government agencies to use New Jersey-produced products wherever possible. This was the highest-ranking category of agricultural commodities in Warren County in both

2012 and 2017, bringing in \$25,248,000 and \$40,793,000, respectively. It accounted for 28% of total agricultural sales in 2012, and 44% in 2017, versus 40% and 45% statewide (*2017 Census of Agriculture*).⁵⁴ This sub-sector exhibited steady growth from \$1 million in countywide in 1987, to \$7.6 million in 2002, before jumping to \$25.2 million in 2012, and jumping again to \$40.8 million in 2017. The county experienced a 232% revenue increase from nursery/greenhouse products from 2002 to 2012, and a 62% increase from 2012 to 2017. The sales increase is attributed in part to businesses taking advantages of market niches and new technologies, supplying specialty products to customers throughout the region.

White had a total of 184 acres dedicated to nursery products (including cultivated sod and floriculture) in 2017, a steady increase from the 174 acres in 2015, and 168 acres in 2005. Despite the growth of this sector, there are no nurseries or greenhouses listed in the state directory of current state certifications,⁵⁵ or any certified operations listed on the *Jersey Grown* website which would be able to market the *Jersey Grown* branding.⁵⁶

In addition to those strategies listed above where nursery, greenhouse, floriculture, and sod products may be applicable, other strategies to follow may include:

- Increase consumer awareness of the *Jersey Grown* brand; utilize the resources of the NJDA for advertisement and marketing purposes.
- Seek and/or expand contracts with large box store operations such as Home Depot, Lowe's, and Walmart; contact Warren County for opportunities.
- Promote "drive up" operations where consumers can buy directly from the nursery or greenhouse.

Field and Forage Crops

The NJDA *2011 Economic Development Strategies* for field and forage crops provide strategies to improve production, yield per acre, and management practices; and support organic crop production plans for a green energy initiative involving biofuel production that could provide a new local market for New Jersey agricultural products. The three prominent crops in White are corn, hay, and soybeans. A total of 3,507 acres are dedicated to field crops, with a heavy focus on corn, hay, and soybeans.

In 2017, the County reported total sales of grains, oilseeds, dry beans, and dry peas to be \$13.9 million, a -28% change since 2012 (\$19.2 million) with hay and other crops totaling \$2.7 million, a 47% change since 2012 (\$1.8 million), together representing approximately 23% of total agricultural sales in Warren County.

Corn In 2017, Warren County ranked second in the State for corn, with a total of 18,431 harvested acres (17,701 acres of corn for grain, and 730 acres of corn for silage), which brought in a total of \$9.9 million in sales. In 2012, Warren County harvested 20,883 acres of corn (19,575 acres of corn for grain, and 1,308 acres of corn for silage), resulting in sales of \$15.4 million. Though the total monetary amount for corn sales is not released on a municipal level, White farmers harvested a total of 1,649 acres of corn (1,568 acres of corn for grain, and 81 acres of corn for silage), a decrease from 2015 when 1,812 acres of corn was harvested (1,728 acres of corn for grain, and 84 acres of corn for silage).

Hay White harvested 1,108 acres of hay, including alfalfa hay, in 2017, an increase from the 1,071 acres harvested in 2015. Warren County on a whole harvested 10,340 acres of Hay (including alfalfa hay, excluding haylage) in 2017, bringing in a total of 24,669 tons, and increase from 10,155 acres harvesting 18,836 tons in 2012.

Soybeans Warren County ranked fifth in the state for soybeans in 2017, with 63 farms harvesting 8,285 acres of Soybeans, bringing in a total of \$3.7 million in sales. The 2017 numbers show a strong increase from 5,661 acres harvested in 2012 totaling \$3.4 million in sales, and the 5,382 acres harvested in 2007 bringing in a total of only \$1.7 million. While the acres of soybeans harvested and the total yield both increased from 2007-2017 by 54% and 56% respectively, the increase in total sales grew by an incredible 118%. White farmers harvested a total of 672 acres of Soybeans in 2017, an increase from 601 acres in 2015.

Field and forage crop strategies to consider include:

- Utilize improved management practices and ways to boost yield per acre.
- Capitalize on any available workshops on cropland and pasture management from the county or state.
- Diversify to row crops that meet newly emerging markets or markets with increasing demand (such as spelt as a dietary substitute for wheat or switchgrass for pelletized energy) and pursue to value-added marketing opportunities (such as sorghum for homemade jams and jellies that can be marketed from roadside stands, at community markets, and over the Internet).
- According to NJAES-RCE “there are a number of profitable alternative world crops that can be grown in New Jersey to satisfy the demand for fresh produce by immigrant populations. These crops are suited to diversified small to mid-size farms where high returns per acre is required.”⁵⁷
- Transition to certified organic or naturally grown bean and grain crops to increase their value.
- Investigate and possibly invest in crop insurance to mitigate market risk.
- Utilize county assistance to investigate alternative crops for local production and new markets (such as hops, specialty small fruits, small-scale animal products).

Dairy

Dairy has historically been one of the dominant agricultural sectors throughout Warren County but is now almost completely gone. In 2017, Warren County only had 22 farms with milk cows, and only 16 farms that sold milk from cows, bringing in a total of \$3.3 million. As of 2017, White had only 30 head of dairy cattle, compared to 205 in 2005. This decrease in dairy production reflects the larger trend seen throughout Warren County.

The NJDA *2011 Economic Development Strategies* for dairy included establishing a premium price for New Jersey-produced milk and ensuring stable pricing; increasing the demand for milk through sale and promotion of *Jersey Fresh* milk and milk products at community and retail markets; promoting FIN-PAK and risk-management software programs to producers;

implementing dairy-quality benchmarks; and establishing a health and safety standard for sale of raw milk directly to consumers.

Strategies for reviving the White dairy industry include:

- If applicable, license under the Jersey Fresh Quality Grading Program, which allows raw milk to be used in goods bearing the logo *Made With Jersey Fresh Milk*.
- Take advantage of the services offered by the Garden State Dairy Alliance, including disease control, milk quality, marketing and promotion, and technical assistance.
- Explore various additional products, such as cheeses and markets for dairy, including local restaurants and grocery markets.
- Aggressively market value-added dairy products, especially those that can carry the *Made With Jersey Fresh Milk* logo.
- Consider and encourage the NJDA’s campaign to establish a process to allow sales of raw milk direct from the farmer to the producer and the positive effects it might have for dairy farmers in Warren County.
- Encourage passage of proposed raw milk legislation that would permit sale of raw milk under certain conditions and establishes a raw milk permit program (A585, re-introduced in the 2020-2021 State Legislative session).⁵⁸

Livestock and Poultry

The NJDA *2011 Economic Development Strategies* for livestock focused on animal health, ensuring safe and legal sales of poultry and eggs at community farmers markets; and supporting youth programs involving livestock. Operations in White include cattle and calves, sheep and goats, hogs, bees, fur, and poultry and eggs, (**Table 22**)

Table 22. Livestock and Poultry in White					
	2005	2010	2015	2017	% change (2005-2017)
Cattle and Calves	293	320	258	124	-58%
Sheep and Goats	118	140	168	132	12%
Swine	2	40	4	43	2050%
Bees	0	3	32	30	100%
Ducks	3	55	39	51	16%
Fur Animals	16	494	0	3	-81%
Meat Chickens	0	145	54	115	100%
Egg Chickens	221	860	794	1,005	355%
Turkeys	2	23	19	58	2800%
Other Livestock	2,300	406	174	157	-93%

Source: Farmland Assessment Data (SADC)

Between the years 2005 and 2017, the cattle stock dropped by 58%, reflective of the end of dairy, and a corresponding reduction in beef cattle.

Other livestock that shows downward trends in White are fur animals (-81%) and other livestock (-93%), following national and state dietary and cultural shifts. The fastest growing animal industries are turkeys (2800%) and swine (2050%). Other growing animal herds are ducks (16%), egg chickens (355%), meat chickens (100%), and bees (18%). These specialized products are easy to sell directly to consumers.

Sheep and goat numbers rose by 12% over this twelve-year time, indicating there might be a niche sector for farmers to explore to provide specialty meat and value-added, such as milk, cheeses, soaps, and mohair products to nearby markets. The national price for wool in 2019 was \$1.89 per pound and the average yield per fleece was 7.2 pounds. *Grown in Warren* highlights the growing demand for sheep and goats due to growing ethnic food market.⁵⁹

To strengthen and expand its place in the White economy, some cattle, sheep, hog, goat, poultry, and specialty livestock strategies may include:

- Ensure animal health.
- Encourage USDA inspections in area farms to permit more direct sales of cuts of beef to consumers.
- Explore various additional markets, including local hospitals and assisted-living operations, restaurants and grocery markets, and increased outlets for meat sales at regional community markets (such as the Hackettstown Livestock Auction) and special events (such as the Warren County Farm Fair).
- Seek opportunities for production contracts with poultry and livestock processors.
- Investigate outlets for dairy products for goats and sheep and educate farmers about the benefits of diversifying into these value-added opportunities.
- Explore increased marketing opportunities for goat meat to meet the preferences of growing ethnic populations in the state.
- Encourage passage of proposed raw milk legislation that would permit sale of raw milk under certain conditions and establishes a raw milk permit program.
- Assist farmers with farming techniques, including continued and additional cooperation with the NJAES-RCE, NJDA, and NRCS.
- Promote the agritourism potential of livestock and livestock products in concentrated agricultural areas including exotic animals and poultry, such as “looking” or “petting” zoos, on-farm sales of value-added products such as wool and cheeses, and educational school tours.

Organic Farming

The NJDA *2011 Economic Development Strategies* for organic farming included promoting federal cost-sharing funds for certification reimbursement; integrating marketing of *Jersey Organic* brand alongside *Jersey Fresh*; and working with NOFA-NJ towards research and technical assistance for organic growers.

Organic crops and animals have the potential to be an important market for the Township of White and Warren County. With an increasing population, potential markets in Pennsylvania and New York State (including Philadelphia and New York City), and increased consumer awareness regarding food production, organic products and the markets that support them should continue

to gain a stronghold and become more mainstream as people demand high quality, readily accessible and affordable organic products. Certification of organic farms is regulated by the USDA via the Organic Food Production Act of 1990 (OFPA) through a National Organic Program (NOP) and can be somewhat costly and time consuming as compared to non-organic farming. This may dissuade some farmers otherwise amenable to this type of farming.

“Natural” farming is a type of farming that seeks to emulate organic farming, but is not overseen by laws or regulations, as is organic farming. Natural farming is somewhat less costly and time consuming than “organic,” and therefore may be a viable option for some farmers and their potential customers. Another alternative, for farmers transitioning to organic production, is the ability to market their products under the NJDA’s newly introduced “Transitional Sustainable” label, eliminating the need to wait 36-months to profit from this niche market. With its strong produce sector, Warren County is in an excellent position to facilitate the market growth of organic and natural agriculture products. Certified Naturally Grown (CNG) is a non-profit organization that offers certification “tailored for small-scale, direct-market farmers and beekeepers using natural methods.” Its standards are based on the NOP standards, but CNG uses a peer-review process, as it is more affordable for small operations than certifying through the state program. The Caristi Farm in Blairstown is certified naturally grown for produce.⁶⁰

Small organic operations (growers or processors), those with gross sales of less than \$5,000 per year of unprocessed organic product and/or less than \$5,000 of processed organic products (such as jam), can be exempted from the NOP certification process. They can market their products as organic if they follow the national organic standards for production, labeling and recordkeeping, but they cannot use the USDA Organic seal, which can only be used on certified products. They can also sell their products to the retail market, which can sell them as organic if the retailer does not re-package or process the product.⁶¹

In 2017, the Census reported two Warren County farms with the USDA NOP certification, one farm making the transition to NOP certification, and one farm which was listed as exempt from certification. On the state level in 2017, 102 farms reported \$13 million in sales of NOP certified or exempt organically produced commodities. There is an opportunity for other farms to invest in this practice to satisfy the continually growing trend.

Warren County and White Township can:

- Improve marketing of organic and natural produce.
- Explore various additional markets, including local restaurants and grocery markets.
- Promote agritourism for organic and natural farms stands.
- Educate growers about organic and natural regulatory and certification requirements.
- Explore ways to support organic food growing and processing.

Equine

The NJDA *2011 Economic Development Strategies* for the equine industry focused on horse health and promotion of the industry through the *Jersey Bred* brand, hosted events, the equine website, and youth programs. The *2017 Census of Agriculture* indicates that New Jersey produced over \$28 million in equine sales. Sales and farm sizes have varied since the category

was created in 2002, where 39 farms averaged \$9,380 in sales. 2007 saw a much higher average sales figure, in part to a low of 35 farms, but largely due to a huge spike in total equine revenues, resulting in a \$22,770 sales average per farm. 2012 saw the lowest average sales, dropping to \$5,188 per farm.

Many equine farms in Warren County consist of pasture and stable horses. Part of the value of this small but viable sector comes from services offered, which are not included in total sales figures. The New Jersey Equine Advisory lists equine operations in their Directory of Facilities.⁶² Farms which have breeding services can make use of the *Jersey Bred* logo when marketing their animals.

On the state level, equine rules adopted August 4, 2008, established Agricultural Management Practices (AMP) for Equine Activities on Commercial Farms (N.J.A.C. 2:76-2A.10) and expanded the list of equine activities eligible for Right to Farm protections (N.J.A.C. 2:76-2B.3). While breeding, raising, pasture, and hay production had always been eligible, the following were newly added: boarding, keeping, training, rehabilitation of horses and complementary activities including but not limited to clinics, open houses, demonstrations, educational camps, farm events, competitions, and rodeos, as long as these activities are related to the marketing of horses that are raised, bred, kept, boarded, trained, or rehabilitated on the farm, and are in compliance with municipal requirements. This state level support is important to the sustainability and viability of the equine sector in Warren County.

To retain and grow its market share in the state and regional equine industry, White can:

- Ensure the health of equine animals.
- Educate farmers about the benefits of equine rules and seek guidance from Warren County about the rights of equine farmers.
- Promote the industry at shows and festivals, such as the Warren County Farm Fair.
- Promote the industry through enhanced listings of Warren County and White equine events in state, regional, and County website and print listings.
- Promote the agritourism aspect of the equine industry through farm tours, horse and pony rides, and boarding and riding lessons.

Wine

According to the *2011 Economic Development Strategies*, the state's grape production has not kept pace with its wine production. Strategies focused on expanding the locally grown content of New Jersey wine; supporting licenses to distill fruit-based spirits; expanding the number of eligible retail outlets supporting the ability to sell wines at farmers markets; and promoting New Jersey's wine trails.

In January 2012, Governor Christie signed into law in a bill permitting direct shipping by New Jersey wineries,⁶³ and on July 2, 2014, the Governor signed into law another bill that establishes a pilot program through March 1, 2018, to allow wineries on preserved farms to conduct special occasion events under certain conditions as defined by the appropriate CADB.⁶⁴ In February of 2020, A2773 was introduced which would "allow preserved farms to hold 14 special events per

year,”⁶⁵ essentially establishing the pilot program in law. The legislation was voted out of Assembly Committee.

A portion of western Warren County, along the Delaware and Musconetcong Rivers and their tributaries, has also been designated by the federal government as a wine grape-growing region.⁶⁶ In 2017, White had a total of 9 acres devoted to growing grapes, and increase from 8 acres in 2005. Warren County had a total of 141 acres growing grapes in 2017, an increase of 117% from the 65 acres in 2005.

White may consider:

- Exploring the feasibility for additional Warren County and White farmers to diversify into grape production (or other fruits suitable for wine making).
- Coordinating with wineries from other New Jersey counties, and New York and Pennsylvania, to grow a regional wine industry.
- Market through state tourism and marketing apparatuses, including the *Jersey Fresh* site (<https://findjerseyfresh.com/explore/#findfresh>), and the Official Tourism Website of New Jersey, *visitnj.org*.
- Encouraging promotion of Warren County and future White wineries and wines, as they develop, through publicity, expanding a County-wide wine trail or wine tour to multiple vineyards, and encouraging expanded distribution of local wines to local outlets such as retail outlets and restaurants, and at other special events.

Aquaculture

The NJDA *2011 Economic Development Strategies* lists New Jersey as one of the country’s largest and most culturally diverse consumer seafood markets. Warren County aquaculture operations rank third in the state in 2017 and include catfish, trout, baitfish, sport or game fish, and other food fish. To support a growing aquaculture and seafood economy, Warren County and White may consider:

- Working with the State Division of Animal Health to identify revenue streams to develop testing and certification for finfish species to allow transportation and sale of live farm-raised fish to markets in other states.
- Assist in crafting a supportive policy and regulatory path to allow aquaculture to grow in New Jersey, including revising the aquaculture rule providing for the Aquatic Farmer License Program, developing land-use permitting specifically for aquaculture, and assisting the industry and NJDEP in utilizing Aquaculture Development Zones.

Agritourism

Agritourism is one potential link in the long-term sustainability of the agriculture industry in White Township and Warren County. A highly successful example of agritourism is the seven-day Warren County Farmers Fair held annually. The Farmers Fair, which highlights the past and present agriculture heritage of Warren County, has been operating since 1937, and is extremely popular, drawing thousands of visitors each year.

Because of a limited number of potential customers within the Warren County region and elevated levels of competition among agribusinesses⁹ involved in agritourism, marketing and strategy is imperative to the success of the agribusiness. One advantage for White farmers is the proximity to New York City and Pennsylvania's metropolitan areas, providing millions of potential customers to target. The NJDA *2011 Economic Development Strategies* for agritourism focused on expanding roadside programs, including signage and eligibility for signage, consumer promotion through an agritourism brochure, press releases and promotion of agricultural fairs, along with continued development of njfarms.org.

The strategy to expand roadside promotion included expanding participation of agritourism operations in the Tourist Oriented Destination Signage (TODS) program through the NJDOT, gaining a discounted agritourism rate and increasing the maximum distance (set at three miles) an operation can be from a state road to be eligible for the signage promotion. At least two of these goals have been achieved: in 2014, the maximum distance for an agritourism operation is 10 miles, and the annual cost per sign is \$400 versus \$800 for other businesses. To be eligible, businesses must be open at least six hours a day, five days a week during its growing or operating season.⁶⁷

Visitnjfarms.org, mentioned in the *2011 Strategies*, is a website sponsored by Rutgers, the New Jersey Farmers Direct Marketing Association, and the New Jersey Farm Bureau (NJFB). Its focus is on agritourism activities provided on commercial farms in New Jersey, and farmers must self-register. It includes a "find farms" option, event listings and a chart showing what is in season, and a map of various agritourism destinations. In 2011, the Rutgers New Jersey Agricultural Experiment State reported that "...census data shows our state ranks first nationally in the percentage of farm revenue earned from agritourism" and that 1 in 5 New Jersey farms offer agritourism activities.⁶⁸

In April 2014, the state gave further support to agritourism as a recognized sector of the agricultural industry by adopting an Agricultural Management Practices (AMP) for On-Farm Direct Marketing Facilities, Activities and Events into the New Jersey Register (N.J.A.C. 2:76-2A.13). The AMP "establishes performance-based standards for commercial farms seeking to qualify for right-to-farm protection for on-farm direct marketing facilities, activities and events that are used to facilitate and provide for direct farmer-to-consumer sales, such as farm stands, farm stores, community-supported agriculture and pick-your-own operations, and associated activities and events that fit within the scope of the Right to Farm Act. The intent of the AMP is to provide statewide standards on which farmers, municipalities, CADBs and the public can rely, while also providing flexibility to commercial farm owners and operators."⁶⁹

The *2017 Census* reports that Warren County had \$4.4 million in direct sales, representing 5% of total agricultural sales for the County. This is an increase of 245% over 1997, even while the total number of farms increased by only 4%.⁷⁰ (**Table 23**)

⁹ Agribusiness refers to the industry of farming, while agritourism is a subsector of tourism drawing visitors to agricultural areas and farm related activities.

Table 23. Direct Sales in Warren County: 1997-2017						
	1997	2002	2007	2012	2017	% Change '97-'17
Farms	162	174	221	161	169	4%
Sales (\$1,000)	\$1,277	\$1,545	\$1,952	\$2,150	\$4,403	245%
<i>Source: Census of Agriculture</i>						

The wine sector has introduced not only tasting rooms and tours, but innovative programs such as music nights and weekend runs through the vineyards in neighboring towns. With continued support from the state, as well as county and local municipal efforts, this sector can benefit local agriculture both for farming as an industry and for the individual farmer as additional income. Agritourism helps change the perspective of the non-farming community and increases visibility, understanding, and appreciation of farming by County residents and visitors. Agritourism can be an important contributor toward the long-term sustainability of White’s agricultural industry. Visibility is given to agritourism opportunities through the many websites and publications. (Table 24) For every dollar in agritourism sales, \$0.58 of additional sales are generated in other businesses (e.g., restaurants, construction companies, insurance providers, etc.).⁷¹

Table 24. Agritourism Websites and Publications	
Source	Description
State	
NJDA <i>Jersey Fresh</i> Website ⁷²	Roadside markets On-farm activities Wineries
NJAES-RCE	Agritourism education ⁷³
NJDA <i>Jersey Equine</i> Website	Equine events ⁷⁴ Equine facilities ⁷⁵
<i>Visit New Jersey Farms</i> Website ⁷⁶	Farms, farm products, activities and events Ability for website visitor to build itinerary of farms to visit
Visitnj.org (Office Tourism Website of New Jersey)	Farms & orchards ⁷⁷ Wineries & vineyards ⁷⁸ Fairs ⁷⁹
Regional	
New Jersey Skylands Website ⁸⁰	Calendar of events Farms, Gardens, Wineries section Family Attractions section, where several regional farms and wineries are listed
Warren County Website ⁸¹	Tourism page includes links to countrywide and regional attractions
Explore Warren ⁸²	Farm markets, and pick-your-own
Organizations	
NJ Farmers Direct Marketing Association, Inc. (www.njfarmmarkets.org) ⁸³	Farms and farm markets

Table 24. Agritourism Websites and Publications	
Source	Description
New Jersey Christmas Tree Growers Association ⁸⁴	Christmas Tree farms

Among the series of recommendations included in this report are:

- Marketing and promotion – centralized promotion system; agritourism marketing website; better inclusion and integration of agritourism on the New Jersey Division of Travel and Tourism marketing materials; stronger links between farmers and Women, Infants and Children (WIC), Senior, and school lunch nutritional programs; and assisting counties with funding for agritourism promotion.
- Liability protection and insurance – support the development of a New Jersey Agritourism Limited Liability act modeled after laws in Virginia and North Carolina and explore ways to reduce costs of liability insurance; encourage farmers and operations to protect their livelihoods with insurance.
- Regulatory guidance for operators – includes proactive communication about relevant regulations, and education about requirements and protections under the Right to Farm Act; address impediments to signage.
- Training and information workshops for farmers – include hospitality training, marketing strategies, and other issue-specific workshops such as liability, grants, traffic, signage; offer a forum for farmers getting into agritourism to interact with those who already are involved.
- Role of CADB – examine preservation policies to identify and address any restraints to agritourism development; provide outreach to operators and municipal officials; develop model long-term leases for farmers renting preserved farmland; host open houses and tours at agritourism operations; encourage municipal adoption of model Right to Farm ordinance.
- Resources – “how-to” website; innovation fund providing grants or low interest loans; technical assistance for farmers in identifying and obtaining grant funding.
- School tours – identify and compile farm-related curriculum for different grade levels.

White can work with the state, the CADB, state agencies, organizations, and County farmers to affect a strong agritourism presence in the County. Strategies may include:

- Establishing additional permanent, three season community markets, which may assist local farmers in selling farm and value-added products, strengthening the business of agriculture within the County.
- Establishing event-specific cooperative farm stands at community events in the County, which would promote and benefit the White farming industry and offer additional opportunities for product sales.
- Creating a regional harvest festival in the fall, a horticultural festival in the spring, or a farm itinerary tour of participating farms that could be listed on the Warren County Tourism page.

- Establishing a working farm devoted to public education, similar to The Farm Institute⁸⁵ on Martha's Vineyard, a working farm on preserved land that offers innovative programs that involve children, families and others, such as local chefs who come in to demonstrate recipes that can be prepared using local produce.
- Working with schools and farmers to develop and promote an expanded curriculum of opportunities for school tours to farms and for farmer visits to schools, maintaining a list of available farmers, and acting as a clearinghouse or coordinating link between schools and farmers.
- Expanding participation in WIC & Seniors Farmers Market Nutrition Program as Certified Farmer Vendors. Four \$5 vouchers are available for each eligible WIC/Senior participant to use June through November to redeem for fresh fruits, vegetables, and herbs grown by local farmers.⁸⁶
- Implementing a permanent signage program on a municipal or county level to supplement the NJDOT Tourist Oriented Destination Signage (TODS) program that alerts and directs tourists and local residents to agritourism destinations to help increase business and income for these farming establishments, informing farmers of the availability of these programs and encouraging participation.
- Exploring growth in other sections of agritourism such as hunting, fishing, and trapping. Often farmers do not charge for these privileges, if they offer them, perhaps, in part because of liability issues. Liability has also become an issue for petting zoos, causing some farmers in other areas to repurpose to "looking zoos" to avoid the safety and health issues that can ensue from interaction between farm animals and visitors. If the Limited Liability protection mentioned above were enacted, farmers might feel freer to generate income from these activities.

Potential challenges to successful expansion of agritourism in White and Warren County include:

- Impediments to farmers making long-term investments in crop diversification (such as the unavailability of long-term leases for farmers who rent rather than own the land).
- Market saturation (too many farmers engaged in any given type of agritourism could cause profitability for individual farmers to fall, even as it contributed more dollars to the overall agricultural sector).
- Lack of recognition for agriculture in regulations and , including municipal, federal, or state regulations that make it difficult or expensive for farmers to participate, such as requiring food products to be processed in federally licensed kitchens or slaughterhouses.

Farmers with direct sales or agritourism activities can post their listings in the following online resources: localharvest.org (CSAs), [NOFA-NJ](http://NOFA-NJ.org) (organic and sustainable), visitnjfarms.org, NJDA websites (Jersey Fresh, Jersey Grown, Made with Jersey Fresh), and Warren County's tourism page. Farmers who want to learn more about running an agritourism operation can start with the resources available from the Rutgers Sustainable Farming on the Urban Fringe website.

Agritourism resources include information on selecting a venture, writing business, marketing and risk management plans, and information on the Right to Farm Act and Agricultural Management Practices.⁸⁷ Additionally, the NJAES-RCE has publications available on its website on specific agritourism topics, such as how to budget for a corn maze.⁸⁸

General Strategies

“Many different agencies, councils and organizations, working through a variety of programs, have the common goal of assisting New Jersey’s agricultural community,” according to the *2011 Economic Development Strategies*. “Strengthened communication and coordination between agencies and programs can result in multiple benefits for the agricultural community.” Two areas of focus were called out: Farmland Assessment and Crop Insurance and Technical Assistance; and Export Development:

- Farmland Assessment –Updating documentation, supporting farmers in filling out applications, and supporting tax assessors in determining farmer eligibility.
- Crop Insurance – Implementing an education initiative in partnership with the USDA Risk Management Agency and Rutgers Cooperative Extension to increase knowledge and skills among farmers and improve their financial health.
- Technical Assistance –Offering assistance concerning the New Jersey Uniform Construction Code as it relates to farm buildings and the Real Property Appraisal Manual, Farm Building Section.
- Recycling and Food – Increasing participation in agricultural plastics recycling programs and assisting food processing industry in finding markets for soon-to expire and expired foods.
- Motor Vehicle Requirements – Providing information about regulations, license plates for farm vehicles, and other vehicle related provisions through a user-friendly website.
- Financing – Providing information on federal, state, and commercial lending institutions financing for agricultural loans.

Grown In Warren (2019)

White farmers continue to look for ways to explore new markets, promote their products, and increase the profitability of their agricultural operations. In 2019, Warren County released a report titled, *Grown in Warren, A Strategic Growth & Planning Report*, which outlines strategies for both Warren County and local farmers to “promote the sustainable growth of farming and related business.” The report includes an analysis of the opportunities, challenges, trends, and recommendations for the agricultural community in Warren County.⁸⁹ As this report mentions, Warren County is “ideally located within a two-hour drive of over 20 million potential customers in the New York-New Jersey-Philadelphia region...who are interested in the locally grown, locally sourced agricultural products that Warren County farmers can provide.”

Strategies include increasing direct marketing operations and promoting visibility through attendance at farmers markets, Community Supported Agriculture (CSA), on-farm sales and agritourism, promoting organically grown produce, sustainably and humane meat and animal products, value-added products, specialty crops, and ethnic products. The report also stresses the importance of internet promotion and direct customer engagement, as well as the promotion of regional initiatives such as “Grown in Warren” and regional bike tours.

The branding and execution of “Grown in Warren” is essential to the marketing and promotion of high-quality produce grown locally for a market invested in sourcing from and supporting local farmers. The four parts to this integral strategy are: 1.) establish the brand, 2.) increase the market share for Warren County’s agricultural producers, 3.) bringing added value to products

that are associated with the “Grown in Warren” brand, and 4.) gaining acceptance and use of the “Grown in Warren” brand among the county’s agricultural community, with re-sellers of those products. and with consumers.

Specific recommendations for farmers to take include:

- Bring Warren County’s agricultural products to the consumer through direct sales.
- Utilize the brand identity of “Grown in Warren” to market products as fresh and locally grown.
- Bring consumers to Warren County with on-farm activities and other agritourism practices.
- Participate in high volume urban farmers markets.
- Establish a CSA operation.
- Adopt practices that will result in multiple complimentary income opportunities.
- Process crops into high margin value-added products such as soups, jams & jellies, personal care products, and other consumer items.
- Create an internet presence to connect with potential customers, bring visitors to the farm, and to sell products direct to consumers.
- Forge relationships with restaurant owners, chefs, brewers, and other institutional consumers looking to source ingredients locally.
- Grow specialty and ethnic produce that includes fruits, vegetables, meats, and poultry.
- Plan for generational succession and transition to the next generation of Warren County farmers.
- Engage in cooperative regional marketing of Warren County’s agricultural products.



The report conducted an in-depth analysis on the strengths, weaknesses, opportunities, and threats (SWOT) to the Warren County agricultural community. (**Table 25**)

Table 25. Grown in Warren – SWOT Analysis	
Strengths include:	Weaknesses include:
<ul style="list-style-type: none"> • Large productive land base • Experienced population of farmers • Proximity to markets • Access to high-income/high-profit activities • Excellent soils • Supportive local communities • Beautiful natural environment 	<ul style="list-style-type: none"> • Aging population of farmers • Very high cost of land • Difficult for new farmers to access land • Difficult access to capital • No established distribution network • Lack of facilities for overnight visitation • Limited public transportation

Opportunities include:	Threats include:
<ul style="list-style-type: none"> • Growing New types of crops • Selling to new markets • Taking advantage of consumer preferences • Developing regional branding • Demand for ethnic products • Demand for organic produce • Expanding opportunities for agritourism 	<ul style="list-style-type: none"> • Volatile commodity prices • High cost of business • Complex & restrictive regulatory environment • Encroaching development • Uncertain impacts of climate change • Changing labor market
<p><i>Source: Grown in Warren Report</i></p>	

There is a strong link between outdoor recreation activities (hiking trails, roads conducive to bicyclist), farming and farm stand locations, and economic prosperity. “Warren County has a great deal to offer visitors interested in agritourism and ecotourism. The county features a beautiful natural environment with a myriad of opportunities for outdoor activities that include hiking, fishing, kayaking and bicycling in addition to on-farm visitation.”

Planning for both agritourism and outdoor recreation is important because, “while the county is well-situated to take advantage of this consumer market in term of geographic location and suitable attractions, there is a decided lack of facilities to support this potentially lucrative source of business. There are few hotels in the county. Municipalities generally do not permit the creation of Bed & Breakfast facilities in the residential zones that predominate in the county’s rural communities. Public transit access is extremely limited.”⁹⁰ Specific recommendations on increasing agritourism and ecotourism in Warren County include:

- Extend marketing efforts to surrounding areas.
- Create and promote themed driving and biking tours.
- Support visitor transportation and accommodation options.
- Encourage multipurpose extended visitation.
- Actively market Warren County as a destination.



One of the benchmarks for a successful campaign was to have 175 farms registered on the “Grown in Warren” portal.⁹¹ It is an additional opportunity for farmers to gain visibility and connect the market with the larger community.

B. Agricultural Industry Retention, Expansion, & Recruitment Strategies

Diversity of agricultural commodities to broaden the agricultural base now dominated by hay, corn, and soybeans would help to ameliorate any economic downswing in either the general economy or a specific sector of the county’s agriculture industry. The AAC and the Township stand behind the local agricultural industry. A majority of White is zoned as R-1 (Detached single family residence, and single-family cluster), which is where most of the town’s farmland is located. As such, the Township’s zoning is supportive of agriculture.

1. Institutional

Minimum wage impact on farm businesses – The State minimum wage was raised to \$10.30 for agricultural employees effective January 2020, followed by an increase to \$10.44 on January 1, 2021. There are further wage increases every year from 2022 until 2027, when the minimum wage reaches \$15.00 per hour.⁹² This minimum wage applies to farm workers and exceeds the federal minimum wage of \$7.25, as does that of neighboring New York State, raised to \$12.50 on January 31, 2020.⁹³ Pennsylvania, however, still has an exception for farm workers, particularly seasonal workers, giving it a competitive advantage in operations that are hired-labor intensive. Generally, the production of vegetables and fruits (produce) requires the highest amount of hired farm labor, mainly at harvest time, to pick and process the vegetables and fruits. White Township farms employ some farm labor to assist with their operations. Other products that are prevalent in the Township such as hay and corn require little or no hired farm labor (most labor is done by farm families). As such, farm labor costs are not as large a problem for farmers in White as they are for farmers in parts of the County or State that have major produce agriculture industries.

Farmer Support—Farmers at all levels can benefit from support. A variety of resources exist at the state level, published on the SADC website.⁹⁴ These include:

- Agriculture credit and finance.
- Business development for agriculture, food manufacturing, and related industries.
- Farm building construction.
- Motor vehicle regulations for agriculture.
- Real property appraisal manual, farm building section.
- Recycling for agriculture.
- Risk management and crop insurance.
- Sales and use tax on farmer’s purchases.
- Trespass, vandalism, and liability on farms.

One program, *Farm Link*, serves as a resource and referral center for new farmers, farmers seeking access to land and farming opportunities, landowners seeking farmers, and farmers working on estate and farm transfer plans.⁹⁵ In 2015, the SADC launched “NJ Land Link,” an interactive website connecting farmers seeking land or farming opportunities with those who have existing farmland or farming opportunities. Farmers interested in land or partnership/job opportunities, as well as those wanting to advertise available land and opportunities, sign up and create and manage their own listings. In FY2018, “NJ land Link had more than 845 registered users and more than 200 active listings.”⁹⁶

Resources specific to estate planning and retirement planning are available through the *Farm Link* Program’s Farm Transfer, Succession, and Retirement Planning section.⁹⁷ Resources include workshops, Farm Succession Guidebook,⁹⁸ plans and planning information, workbooks and worksheets, and informational documents. Farm Link can also be used to facilitate succession when there is no next generation to take over the farm. Information is also available for the incoming generation of farmers through this Farm Link Program.

Two resources available to farmers through the SADC are the New Jersey Farmland Leasing Guidebook,⁹⁹ created as part of a Beginning Farmer grant project,¹⁰⁰ and a New Jersey Agricultural Mediation Program Handbook, subtitled “A Guide for Farmers, Neighbors and Municipalities.”¹⁰¹ In addition, the state, NJAES-RCE and supply companies, such as fertilizer and pesticide merchandisers, provide other often-seasonal workshops for farmers, keeping them up-to-date on various issues related to the agricultural community.

Another opportunity is the New Jersey Agricultural Society’s New Jersey Agricultural Leadership Development Program (NJALDP), administrated by Burlington County College.¹⁰² NJALDP is “a two-year professional development opportunity, which is designed specifically for individuals in farming and agribusiness to become informed, articulate leaders.” Through a series of seminars and domestic learning experiences, NJALDP participants explore various agricultural topics, debate key issues, sharpen communications skills, particularly through public speaking, and establish and cultivate an extensive agricultural network throughout the state.

One program which could be expanded to Warren County is the School Gardens initiative, funded by Team Nutrition Training mini-grants provided by the USDA, the NJDA of Agriculture, and Grow Healthy – a program of the NJAES-RCE. This is a hands-on way to educate children about the importance of farming. Expanding this program to schools in White would be a great way to increase the awareness of both students and their parents about the benefits and value of the agricultural industry in the Township.

According to the NJAES-RCE, the Grow Healthy program is a way to:

- Help children eat more fruits and vegetables.
- Offer nutrition education, physical activity, gardening and agriculture programs.
- Connect with local farms.
- Serve more local foods.
- Offer farm-to-school and nutrition trainings for foodservice staff.¹⁰³

The Grow Healthy Initiative in Warren County is run by Sherri Cirignano, Family & Community Health Sciences Educator II (phone: 908-475-6504; email: cirignano@njaes.rutgers.edu).

Marketing, Advertising, Public Relations Support

Marketing and advertising are critical to profitability. Some farmers do opt to use paid advertising in local newspapers, but many, particularly those with smaller farms, hesitate to consider advertising, believing that the costs outweigh the benefits. They prefer to take advantage of free or less costly opportunities to market their products, such as state, regional, and County public and promotional websites that will “advertise” the products. Several embrace the opportunities of direct marketing, from roadside stands and from their own websites.

The CADB, the NJAES-RCE, and the state are great resources for farmers to learn about the availability of various free promotional channels such as the *Jersey Fresh*, *Jersey Bred*, *Jersey Grown* and *Jersey Equine* websites, Visit NJ Farms website, and the Warren County “Tourism” web page. For those farmers who want to consider paid advertising or garner free media coverage, web resources can help with the planning. For example, the New Jersey State

Horticultural Society website publishes ad rates for its quarterly newsletter, *Horticultural News*.¹⁰⁴ Another website for Community Involved in Sustaining Agriculture (CISA),¹⁰⁵ a non-profit organization in Western Massachusetts, offers a Basic Marketing Practices manual.

Signage

Signage promotes visibility and awareness of agriculture in general, as well as benefitting the individual farmers. Municipal considerations of farming needs when drafting their sign ordinances can be helpful in supporting farmer' efforts to promote their products. Farm stands are often seasonal businesses that need to capture potential sales at harvest time. Signs that give directions to the farm stand and let customers know what is available are important. Having farm-friendly ordinances in place can make it easier for farmers to promote their products and can minimize right-to-farm complaints in cases where farmers run up against opposition to their signage, whether from neighboring residents or municipal officials. Farm signage can also benefit the municipality by drawing more visitors and dollars to the area, benefitting other businesses in the community as well as the farmer. Signs should conform to local, county, or state right-of-way and sight standards.

For farmers who qualify for the *Jersey* series of marketing programs, signage is available. This ranges from free price cards to banners and stickers, hats, and T-shirts. *Jersey Fresh* point-of-sale signs and other materials, both free and fee-based, can be ordered using the point-of-purchase application on the NJDA's Marketing and Development Jersey Fresh page. Information on how to participate in the *Jersey Fresh* program is also included.¹⁰⁶

Farmers Markets

In 2020, three community farmers markets were operating in Warren County. It is suggested that the County consider establishing a three-season market:

- Blirstown Farmers Market, across from Blirstown Elementary School, 5 Stillwater Road, Saturdays 9:30 am – 1 pm, June 6–October 31.
- Washington Borough Weekly Farmers Market, Washington Borough Main Street (Route 57), near the Downtown Pocket Park (40 East Washington Avenue), Saturdays 10 am – 2 pm, June 20 – September 26.
- Warren County Farmers Market, 565 County Route 519, Belvidere (White Township School), Sundays 10 am – 2 pm, June 2 – September 29.

Community Supported Agriculture (CSA)

Economic support of the White agricultural community also comes from local grass roots groups. This support is embodied in CSA, which consists of:

- A community of individuals who pledge support to a farm operation so that the farmland becomes the community's farm. In such an arrangement, the growers and consumers provide mutual support, and share the risks and benefits of agriculture.
- Members or "share-holders" of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary.
- Members receive shares in the farm's products throughout the growing season.

- Members also receive the satisfaction gained from reconnecting to the land and participating directly in food production.
- Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests.
- Generally, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.¹⁰⁷

Genesis Farms offers a CSA of single and farm shares of its produce output. It is located on Silver Lake Road just outside the Blairstown Township border, but with a Blairstown mailing address. The Foodshed Alliance is a grassroots group that is in Blairstown Township. This group sponsors the Blairstown Farmers Market and supports community agriculture in the greater Warren County area. The Foodshed Alliance seeks to “*promote a robust farm economy in northwest New Jersey through local efforts and regional collaborations.*” The Alliance promotes local efforts by assisting individual farmers with sustainable farming methods, making preserved farmland accessible to farmers at affordable long-term leases through the Sustainable Agriculture Enterprise (SAGE) program, protecting rivers through the voluntary River Friendly Farm Program, working towards establishing a food hub in New Jersey, connecting farmers with consumers through farmers markets and buyers clubs, and gathering information about how much land is being farmed in the Ridge and Valley region. In addition, the Alliance has published the Food Hub Feasibility Study For Northern New Jersey, the Northern New Jersey Regional Foodshed Resiliency Plan, and the Sustainable Agriculture Enterprise Information and Application for Sustainable Farm Businesses.¹⁰⁸

Agricultural Education and Market Research Coordination--White may want to consider coordinating with Warren County and the Rutgers Cooperative Extension (RCE) of Warren County to identify and integrate market research on agriculture and economic trends. The NJAES website offers additional information relating to animal agriculture, farm management and safety, pest management, plant agriculture, and other elements of interest to those involved in commercial agriculture. The Warren County NJAES-RCE traditionally has been a sponsor of workshops, often funded through grants secured by the NJAES-RCE, and a helpful resource for local farmers in many other ways.

Rutgers School of Environmental and Biological Sciences (SEBS) is “committed to the study of how human and environmental health can intersect to support a healthy and sustainable future.”¹⁰⁹ Programs and activities include on-campus living labs, research laboratories, farms, greenhouses, gardens, living-learning communities, a historic herbarium, and an entomology museum.

Strategies White can use to support agricultural education and market research coordination include:

- Coordinate with NJAES-RCE and NJDA to research and market agricultural education.
- Seek grants to fund farmer education.

2. Businesses

Input Suppliers and Services

Very few, if any, large scale agriculture suppliers, which supply medium to large size agriculture operations, exist in Warren County. The several suppliers in the area operate on smaller, more local scales. Many such suppliers are farmers themselves (for instance, selling feed from their corn crops to other local farmers raising animals), without any formal business practices such as advertising.¹¹⁰ Without an adequate number of suppliers within reasonable driving distances of farms, the business of farming can become so expensive and time consuming as to not be profitable. The Township welcomes agriculture-related businesses within the confines of its existing zoning.

With the decline of local suppliers, and the ease of access through the internet, mail orders from supply stores further away might work for small equipment or shipments. It is not ideal for large orders. Equipment and supply stores in Warren County include:

- Tractor Supply in Blairstown and Washington Townships, Warren County.
- Central Jersey Equipment in Columbia.
- Frank Rymon and Sons in Washington Township, Warren County.
- Tickner's in Hackettstown.
- Smith's Tractor in Washington Township, Warren County.
- Mayberry in Port Murray.
- S&L Kubota in Belvidere.

Seed and chemical supplies in the area include:

- North Warren Farm and Home Supply in Blairstown.
- Penwell Mills Feed in Port Murray.
- Ise Feed in Stewartsville.

Product Distributors and Processors

Processing facilities such as creameries, slaughterhouses, and lumber mills have become absent from Warren County, and therefore White as well, forcing local farmers to ship their products out of town to be processed.¹¹¹

Field and forage crops are generally sold locally to cattle and equine operations, landscapers, nurseries, and farm stands as baled straw, or kept for the farmer's own livestock and other uses. Small volumes are also sold at the Hackettstown Livestock Cooperative Auction Market. Corn products¹⁰ are almost entirely sold wholesale and fluctuate depending on the national market. Small amounts of corn are sold as retail to hunters for bait.

Produce products are sold through a variety of channels. The majority is sold through retail markets to maximize profits, and some are sold either directly to consumers or through roadside

¹⁰ This does not include sweet corn, which falls into the produce section below.

stands. Some farmers may travel to metropolitan areas, including New York City, to sell produce at farmers markets and/or greenmarkets. Additionally, some produce is wholesaled to local supermarkets.

Livestock products can be quite varied. Some animals are sold in their entirety directly to consumers (whether still alive or previously slaughtered). Other animals are sold at the Hackettstown Livestock Cooperative Auction Market. Farmers, as well as wholesalers, butchers, and private individuals sell, buy, and trade livestock, eggs, and crops at the Market. White farmers use the Livestock Cooperative Auction for the purchase and sale of agricultural livestock and products.¹¹² The Auction is located on West Stiger Street in Hackettstown and is open every Tuesday throughout the year. It is the only remaining livestock auction in the state and is a staple of the Warren County agriculture industry.

3. Anticipated Agricultural Trends

Product Demand

From a county historical perspective, total agricultural sales have increased sharply from \$39.7 million in 2002, to \$75.5 million in 2007, \$91.2 million in 2012, and \$93.2 million in 2017. Much of this growth has been fueled by increased grain, nursery, and greenhouse sales, in part due to the consolidation of several large farms and cost-savings through economies of scale. The nursery, greenhouse, grain, and vegetables sectors of the agricultural industry should continue to be healthy and viable sectors since they often serve the needs of increasing livestock practices such as sheep, goats, and poultry in the face of a declining cattle industry, as well as a burgeoning population of homes and businesses within the County and the region.

The livestock sector has seen changes to its non-dairy and dairy subsectors, both of which have experienced lengthy declines in cattle stocks but have held constant since the early 2000s. Milk production follows this trend as well, with the commercial dairy industry completely gone now. The cattle industry is believed to be trending towards smaller and smaller farming operations, many of which will raise a small amount of cattle as part-time jobs to qualify for farmland assessment.¹¹³

Value-added products can bring additional income to farms involved in direct marketing through farm stands and websites. Direct marketers can capitalize on the advantages of selling at retail rather than wholesale, selling from their own location rather than having to pay transport costs, and of generating additional income by developing value-added products such as pies, cheeses, jams, honey, and other products that serve the increasing numbers of customers who want the advantages of ready-made and the appeal of items “home-made” by someone else.

An increased demand for organic products may encourage farmers to adopt more natural farming methods. Since federal certification requires a three-year commitment, many farmers may lean toward “natural” farming methods for food crops and for livestock, such as grass-fed beef raised without hormones or antibiotics.

One emerging trend is the emerging resurgence of hemp (*cannabis sativa*). The growing support for hemp products, and the recent legislative actions which removed it from the Schedule I list of

Controlled Substances Act, have created a new market. The “New Jersey Industrial Hemp Pilot Program” was signed in 2018, for hemp that is cultivated and tested to ensure that THC content does not exceed 0.3 percent.¹¹⁴

Other avenues to explore include:

- Changing the farm operation’s mix of products.
- Consider new crop opportunities being researched/promoted by the NJDA, the NJAES-RCE, and the NJFB: hops, tree nut crops, organic or low input produce or meat products, aquaculture, biotechnical and pharmaceutical use of farm products or animals, and hemp.
- Marketing livestock as dressed meat on a retail basis.
- Fresh herbs, sold at retail, in bunches or as potted plants.
- Economic development through preservation.
- Agricultural Enterprise District (AED) as a potential preservation mechanism. Modeled after Urban Enterprise Zones, the AED would provide economic development advantages, particularly to preserved farms, and use taxes from farmland assessed land to seed the formation of an economic development corporation and development of a program.

Market Location

White is located near the large population centers of New York City and Philadelphia, with a direct route to New York City via Interstate Route 80. Maximizing the use of nearby highways can increase the number and type of consumer markets to be reached by White farmers. At least one local farm, Race Farm in Blairstown, takes advantage of these connections to bring produce as far as New York City on a weekly basis year-round and to community farmers markets in northeastern New Jersey.

The agriculture community in White can seek contracts with area schools to supply healthy, fresh farm products for use in their cafeterias. Area hospitals and senior/nursing homes are also possible customers. Since all of these are permanent institutions, once established these markets can be considered as “permanent customers” and revenue sources for the White agricultural community.

Future of Agriculture

Among the most substantial trends reshaping the Township’s agriculture base is the rapid rise of the crops sector. Since the 2002 Census, crop, nursery, and greenhouse products have outpaced livestock and poultry sales. Niche products such as packaged and organic goods that generate “value added” revenue streams are likely to increase.

Challenges facing White’s farmers are land prices and property taxes. Higher land prices threaten to replace many of the County and Township’s farmlands and open space areas with residential and commercial developments that are less compatible with agricultural production.

The average age of farmers in Warren County is increasing. Young farmers are attracted by higher paying opportunities in other employment sectors, and fewer are becoming farmers. Consequently, the average age of farmers in Warren County has increased from 50 years old in

1982, to 56 years old in 2002, 59 years old in 2012, and to an interval between 55 and 64 in 2017.

4. Agricultural Support Needs

Agricultural Facilities and Infrastructure

The County lacks permanent suppliers of items such as seeds, feed, and chemicals required to keep farms productive. The majority of such services involve local farmers selling these items to one another, hampering the stability of these support services. An increase in permanent agricultural suppliers would work to guarantee the stability of these services, and in turn, the agricultural industry.

Ultimately, it comes down to whether there are enough opportunities to make money in supporting the County and region's agricultural industry. If those outside the farming community see ways to make profits doing so, then they will feel much more confident in setting up operations, whether they be cattle and equine veterinarians, feed and fertilizer suppliers, or machinery sales and repairs,¹¹⁵

The Foodshed Alliance released a report in 2018 titled, "*The Foodhub Feasibility Study*," which analyzes the benefit of having a food-hub (an aggregation and distribution facility). The report found that a food hub "could help strengthen the farm industry in New Jersey by giving farmers easy access to institutional buyers to fill the need for locally grown, fresh healthy food."¹¹⁶

Flexible Land Use Regulations

State Level – Examples where regulatory flexibility is important are the NJDEP's "Freshwater Wetlands Protection Act Rules" (N.J.A.C. 7:13-et. seq.), which grants exemptions for agricultural activities, and the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). The latter was adopted in 2007 and amended last in June 2019, with amendments for agriculture effective June 2016, including numerous agricultural permits.¹¹⁷

Municipal level – Building an awareness of and provisions supportive of agriculture into municipal master plans and zoning ordinances can go a long way towards the kind of support agriculture needs to be an economically viable sector. As of 2020, White Township identified South Bridgeville Road, between Brass Castle and Belvidere Roads, as a potential site for agritourism. (2020 Master Plan Amendment) White farmers also benefit from having a Right to Farm ordinance enacted in their township.

Other areas where municipal sensitivity to the land use needs of agriculture can be helpful include consideration of the following issues when creating municipal regulations:

- Setting specific buffer standards for non-farm development adjacent to working farms that help to limit trespassing and littering and protect the residential landowner from dust and spray materials spread during farm activities, thus minimizing potential Right to Farm conflicts.
- Code or ordinance provisions requiring developers to notify purchasers of the proximate existence of active agriculture.

- Exemptions for certain farm structures from building height restrictions.
- Allowing additional principal dwelling units on farms to meet the needs of farmers for additional housing for their children or for farm managers.
- Exemptions from setback requirements when farmers seek to expand an existing nonconforming structure.
- Flexible fencing ordinances that make allowances for types of fencing on farms that might not be desirable in residential zones, in consideration of the farmers needs to prevent wildlife damage.
- Construction fee reduction for agricultural buildings.

Incorporating agriculture into local planning and zoning documents will help the Township protect its farmlands and rural character in the face of development pressure. As an example of its support of local agriculture, White passed a Right to Farm ordinance in 1997 to ensure farmers can practice accepted agricultural operations. In addition, White supports farms, harvesting, storage, packaging and processing of farm products, and wholesale and retail marketing of crops, plants, animals, and other related commodities.

Agriculture Representation in Economic Development

The Warren County Economic Development Committee (EDC) was created in January 2016 to serve in an advisory capacity to the Board of Commissioners, to assist the County in promoting economic development, including an increased focus on tourism and agritourism. An established framework will be used in coordinating local, state, and federal efforts towards this end, including a major emphasis in laying the basic groundwork necessary for attracting and encouraging sound economic growth within the County.¹¹⁸ A list of business resources within Warren County is available on the EDC website at <http://warrencdev.com/business-resources>.

5. Agricultural Support Implementation

The NJAES-RCE of Warren County has always been a source of support to local farmers, helping them adapt to new technologies, introducing new farming practices to improve efficiency, and keeping farmers up to date with market trends. With the rise of online shopping, more and more people are choosing to order products, including agricultural products, from the comfort of their own homes. The NJAES-RCE can work with local farmers in expanding their presence to the web in addition to traditional advertising such as signage and roadside stands.

The average age of farmers is increasing as well, with a large need for new generations of farmers to come in and take over agricultural operations in the years to come; the NJAES-RCE can reach out to those interested in or just beginning their own farming operations, assisting them in reaching the point where their operations become profitable.

The Township, as well as the County and other relevant parties, can also continue to promote agritourism, helping to boost farm revenues and raise local awareness of, and support for, farming operations. This can be done in conjunction with the non-farming community, such as local artists, who can help in attracting people who may primarily be more interested in artwork or music than agriculture and end up gaining exposure to farming activities and products when visiting art exhibits or concerts.

Federal agriculture support can be found through the USDA's Grants and Loans webpage¹¹⁹ including grant and loan programs ranging from farm loans, housing assistance, rural development loan and grant assistance, beginning farmers and ranchers, livestock insurance, specialty crop block grant program, the farmers market promotion program, and the organic cost share program.

Sustainable Agriculture Research and Education (SARE) is a USDA competitive grants program that helps build the future economic viability of agriculture in the United States.¹²⁰ SARE funds are used for:

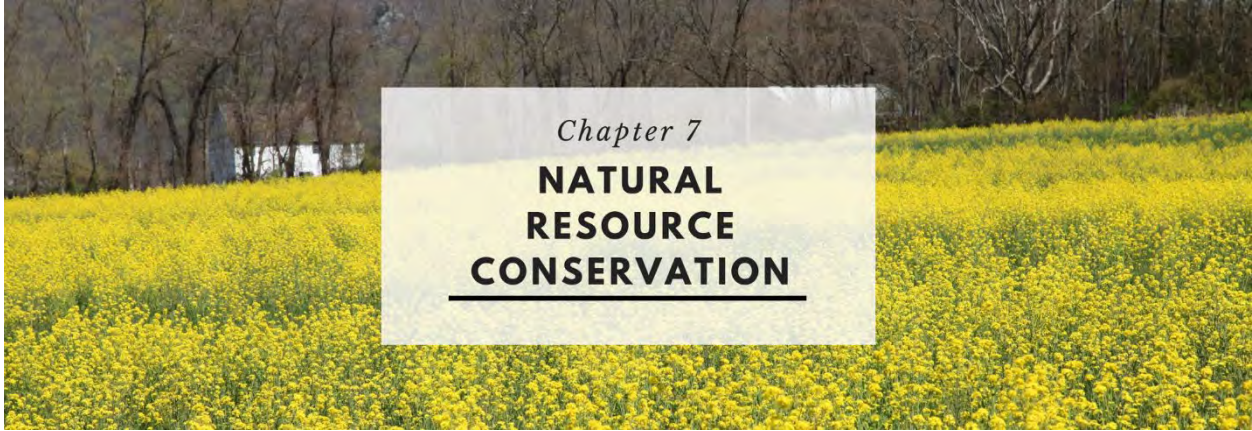
- *Farmer & Rancher Grants*: These grants have the goal of helping farmers shift to practices that are environmentally sound, profitable, and beneficial to the wider farm community.
- *Partnership grants*: These grants are for RCE and NRCS personnel, non-profits, and agricultural consultants who work directly with farmers. Grants are used for on-farm research and demonstration projects that address sustainability.
- *Sustainable Community Grants*: These grants allow for key issues to be addressed which connect farming with community prosperity and revitalization.
- *Professional Development Grants*: These grants fund professional development projects that help RCE educators and other agricultural professionals learn and transmit the knowledge needed to help farmers move toward greater sustainability.
- *Research and Education Grants*: These grants fund research and education projects that lead to farmers adopting sustainable practices. The emphasis is on improved farming practices and an enhanced quality of life for farmers and rural communities.

State agriculture support includes the 2020 Specialty Crop Block Grants, New Jersey Wine Industry Project Grants, Soil and Water Conservation Grants, New Jersey Risk Management and Crop Insurance Education, New Jersey Junior Breeder Loan Fund, Organic Cost Share, and Farm to School Mini Grants. More information can be found on the NJDA Grants webpage,¹²¹ accessed through the following link: <https://www.nj.gov/agriculture/grants/>.

Farmland Preservation Programs support include State Acquisition, County Planning Incentive Grants, Municipal Planning Incentive Grants, and Grants to Non-Profits. More information can be found through the SADC webpage,¹²² accessed through the following link: <https://www.nj.gov/agriculture/sadc/farmpreserve/programs/>.

New Jersey Farm Bureau

The NJFB is a private, non-profit membership organization that represents the agricultural producers and enterprises in New Jersey at all levels of government. The NJFB advocates for farmland preservation, environmental regulations, wildlife and water issues, and legislation relating to agricultural labor and the Right to Farm. Through grants, initiatives, and partnerships, the NJFB educates the public about the agricultural industry and participates in farmer training and education programs.¹²³



Chapter 7: Natural Resource Conservation

A. Natural Resource Protection Coordination

1. Natural Resources Conservation Service

There are numerous public and private entities, which administer, fund, and provide technical guidance for White farmers relative to natural resource conservation. An important partner in support of natural resource conservation for the agricultural community is the USDA NRCS. The NRCS “*provides assistance to private landowners [including farmers] in the conservation and management of their soil, water, and other natural resources.*” The NRCS provides technical assistance suited to the natural resource issues that are specific to a farmer’s needs, with ample opportunities for cost-shares and financial incentives.¹²⁴

White farmers may utilize this local NRCS office for assistance. NRCS also will reach out directly to landowners if they know of a farmer who needs technical assistance or could use the guidance of the NRCS staff. The local NRCS office serving White Township:

Address: Building 1, 101 Bilby Road, in Hackettstown Commerce Park.
Phone and Website: 908-852-2576, www.nj.nrcs.usda.gov
Staff: Dan Mull, District Conservationist, 908-441-7518, dan.mull@nj.usda.gov¹²⁵

Within one year of selling their development easement, owners of preserved farms are required to develop a Conservation Plan. A Conservation Plan is required to apply for Wildlife Habitat Incentive Program (WHIP) and the Environmental Quality Incentive Program (EQIP). The following strategies would strengthen natural resource conservation efforts for farms in Warren County and its municipalities, including White:

- Providing a mechanism and staff to ensure that Conservation Plans are prepared and implemented will guarantee that the objectives of the program are put in place, and active stewardship practices are underway.
- While NRCS services are voluntary, farmers can benefit from conservation. Conservation can help make farmers eligible for NRCS and USDA funding.¹²⁶

The NRCS “Field Office Technical Guide” contains technical information about the development and implementation of soil, water, air, flora, and fauna resource conservation practices, and is used to develop conservation and resource management plans.¹²⁷ Conservation practices discussed in the Guide that are pertinent for White include, but are not limited to:

- Riparian buffers, including necessary buffer widths and plant species.
- No till and minimum till practices.
- Prescribed grazing and pasture management.
- Nutrient management, including manure and fertilizers.

In November of 2020, the USDA NRCS completed an update to its National Conservation Practice standards. The 2018 Farm Bill required the NRCS to review these practices. They provide guidance for planning, designing, installing, operating, and maintaining conservation practices. Some of the main areas of interest they cover are:

- Irrigation water management
- Heavy use area protection
- Composting facilities

Two new conservation practices which deal with wastewater treatment and wildlife habitat planning will be added, and an additional 18 conservation standards are being tested to establish and document natural resources benefits. This update addresses changes in technology and added criterion for soil health, water conservation, drought tolerance, and resiliency.¹²⁸

2. Upper Delaware Soil Conservation District

The NJDA Division of Agricultural and Natural Resources includes the State Soil Conservation Committee (SSCC). Among its objectives are the protection of agricultural lands through farmland retention and productivity improvements, control and prevention of soil erosion and sedimentation on agricultural land, protection of water quality and control, and prevention of storm and flood water damages.¹²⁹

The SSCC coordinates and supports the work of the state’s 14 local soil conservation districts (SCDs), including the Upper Delaware SCD. The SSCC are part of the New Jersey Conservation Partnership, which also includes the USDA NRCS and NJAES-RCE. The Upper Delaware SCD is charged with implementing natural resource conservation and assistance programs and services, which include agricultural conservation planning assistance, agricultural conservation cost-sharing program grants, application of organic materials on agricultural land, agricultural water supply and management, soil erosion and sediment control, storm water discharge authorization, and soil surveys.

The Upper Delaware SCD works with the NRCS in providing survey assistance, engineering designs and plans. For development easements which require a conservation plan for the farm to be obtained within one year, the NRCS will prepare a conservation plan at no cost to the farmer. It also provides administrative support to Conservation Assistance Program (CAP) in support of Federal Farm Bill Conservation programs and the New Jersey Farmland Preservation Program,

including the preparation and implementation of Conservation Plans. Its goal is to promote best management practices (BMPs) for soil erosion and sediment control, animal wastes, nutrient management, water quality improvement and other natural resource management concerns.

White farmers may approach this local SCD office (as well as the local NRCS office) with a Request for Assistance (RFA) to apply for funds from the State Conservation Cost Share program and federal programs such as EQIP. If approved, the RFA is forwarded to the local NRCS office in Hackettstown for processing. The administration of the RFA includes preparation of a Conservation Plan and program contract. The Upper Delaware SCD is involved in review of Conservation Plans and program contracts and must give final approval to both. The Upper Delaware SCD office serving White farms is:¹³⁰

Address: 51 Main Street, Suite B in Blirstown

Phone: 908-852-2579

District Manager: Sandra Myers, smyers@upperdelawaregcd-nj.com

Staff: Tim Matthews, District Forester, Eileen Greason, SESC Inspector Warren County

Rutgers New Jersey Agricultural Experiment Station, Cooperative Extension of Warren County (NJAES-RCE)

The NJAES-RCE of Warren County provides field and technical research on BMPs for farmers to ensure the long-term viability of both the agricultural economy and the natural resources upon which it is based.

The NJAES-RCE of Warren County offers the Agriculture and Natural Resource Management program to provide educational programs and services including soil testing, insect identification, plant disease diagnosis, and pest management recommendations for agricultural operations.¹³¹ The NJAES-RCE of Warren County is:¹³²

Address: Warren County Administration Building, Suite 102, 165 County Route 519 South in White Township (mailing address of Belvidere)

County Extension Department Head:

Alayne Torretta, 908-475-6502, torretta@njaes.rutgers.edu

Agricultural and Natural Resources Senior Program Coordinator:

Henry Bignell Jr., hdbignell@njaes.rutgers.edu

New Jersey Department of Environmental Protection

The NJDEP Division of Parks and Forestry oversees the Private Lands Management Program. The aim of this program is to foster wise stewardship and management on 1.54 million acres of forest lands owned by 88,700 private landowners, and the retention of these lands in contiguous and productive forests (*Division of Parks and Forestry*)¹³³ This includes the private woodlands currently under Farmland Assessment, which totaled 228,000 acres statewide in 2020. (*Farmland Assessment*)¹³⁴ Many properties in White that are farmland assessed include extensive woodland tracts, especially in the northern portion of the Township. Such tracts were added as “farm products” in the 1970s. There are two classifications of woodlands: appurtenant (or attached) and non-appurtenant (or unattached). Requirements for non-appurtenant woodland tracts are listed in N.J.A.C. 18:15-2.7. These tracts must be utilized by the farmer as a sustainable

“product,” and require Woodland Management Plans (WMPs) to receive reduced local property taxes accorded properties in the farmland tax assessment program.¹³⁵

The Division of Parks and Forestry, Bureau of Forest Management (BFM), reviews farmland assessment applications that include WMPs prepared for farmers by private consultants. The BFM maintains a list of foresters approved for this purpose.¹³⁶ Once a WMP is in place, a Woodland Data Form (WD-1) must be submitted with the farmland assessment application yearly to certify compliance with the WMP.

Non-appurtenant woodlands are woodland acreage on a farm over and above total farmed acreage (tilled and pasture). For example, if 50 acres of a farm are tilled or pastured, and there are 125 acres of woodlands on the farm, 75 acres of woodlands would be non-appurtenant (125 woodland acres minus 50 farmed acres). In White for 2019, there were 2,718 acres of non-appurtenant (or unattached) woodland acres in farmland assessment.¹³⁷ The total of non-appurtenant woodland acres in 2019 was up from 2005 when there were 2,462 acres. The 2019 non-appurtenant acres are also up from 2000 when there were 2,703 acres, and in 1990, when there were 1,133 acres in farmland assessment in White.¹³⁸ (**Table 26**)

Table 26. Woodlands in White Township		
Year	Non-Appurtenant Woodlands (acres)	Appurtenant Woodlands (acres)
2019	2,718	1,189
2005	2,462	976
2000	2,703	1,202
1990	1,133	1,374
<i>Source: Farmland Assessment (SADC)</i>		

Appurtenant woodlands are woodland acreage on a farm, less than or equal to, farmed acreage. In the preceding example, 50 of the 125 woodland acres would be appurtenant. Appurtenant woodland acres do not require a WMP to qualify for farmland assessment. In White for 2019, there were 1,189 acres of appurtenant (or attached) woodland acres in farmland assessment, down from 2000 when there were 1,202 acres. In 1990, there were 1,374 appurtenant acres in farmland assessment in White. (*New Jersey Farmland Assessment*)

The NJDEP’s Nongame and Endangered Species Program, since 2005, administered the Landowner Incentive Program (LIP). This program worked to improve habitat management and protection for threatened and endangered species on private lands, some of which were agricultural lands. Since 2014, there is no expectation of congressional reapproval of LIP. While LIP is no longer available, other incentive programs through NJDEP are listed on the NJDEP, Division of Fish and Wildlife website.¹³⁹

USDA, Forest Service’s Forest Stewardship Program

The United States Forest Service (USFS) sponsors the Forest Stewardship Program (FSP), administered locally by the BFM. In the summer of 2017, the Forest Stewardship Program transitioned to a new program that eliminated income requirements to qualify for the program and enhanced monitoring and management of enrolled acres.¹⁴⁰ This program supports

landowners whose property has a FSP that recognizes and manages the wetlands, wildlife, aesthetics, soil, and water in addition to the woodlands on the property. This program, when fully funded, offers landowners cost-share initiatives of up to 75% of the cost of a new or revised FSP to allow the landowners to fully follow the guidelines in their plan.¹⁴¹

As of 2020, 184 properties covering 9,891 acres in Warren County are enrolled in FSP.¹⁴² In 2020, White contained 1,671 acres of farmland on 25 different properties enrolled in the Forest Stewardship Program.¹⁴³ The New Jersey Forest Service Northern Region office is:¹⁴⁴

Address: 204 Main Street (Route 206 N), Andover, NJ 07821

Phone: 973-786-5035

Website: https://www.state.nj.us/dep/parksandforests/forest/stw_inc_prog.html

North Jersey Resource Conservation and Development Council (NJRC&D)

The Resource Conservation and Development Program (RC&D) began in 1962 to “help people care for and protect their natural resources to improve an area’s economy, environment, and living standards.” Among other programs, the NJRC&D offers a River-Friendly Farm Certification, which is a voluntary certification program designed to provide technical assistance and recognize farms that protect natural resources through responsible management. In more recent years, the program has expanded into Warren County with the certification of two farms in the past five years.¹⁴⁵ The NJRC&D offers no till drill rental for cover cropping and pasture reseeded, rain garden design and rebates, and a small grant funding program to assist farmers in implementing BMPs through a Water Quality Restoration Grant from the NJDEP. NJRC&D is located at:

Address: 10 Maple Avenue in Asbury, Warren County

Phone: 908-574-5368

Executive Director: Laura Tessieri, ltessieri@northjerseyrcd.org

Private non-profit groups and private citizens

The preservation of agriculture and agricultural resources requires not only the broad support of state, county, and local governments but also the help of private non-profit groups and citizens. The White agriculture community has the support of a variety of organizations, including the Warren County Board of Agriculture, New Jersey Farm Bureau, 4-H, Future Farmers of America, and the Warren County Farmers Fair. Local and regional non-profit organizations also contribute to the permanent protection of farmland. These groups include the Ridge and Valley Conservancy, The Land Conservancy of New Jersey, The Nature Conservancy, New Jersey Conservation Foundation and New Jersey Audubon Society.

B. Natural Resource Protection Programs

1. SADC Soil and Water Conservation Grants

The types of soil and water conservation projects funded by SADC include soil erosion and sediment control systems (terrace systems), control of farmland pollution (stream protection; sediment retention, erosion or water control systems; animal waste control facilities; and agri-

chemical handling facilities), the impoundment, storage and management of water for agricultural purposes (diversions; water impoundment reservoirs; irrigation systems; and drainage systems), and management of land to achieve maximum agricultural productivity (land shaping or grading) while conserving natural resources.¹⁴⁶

These grants fund soil and water conservation projects approved by the Upper Delaware Soil Conservation District (UDSCD), with the program administered by both the UDSCD and the local NRCS office in Hackettstown. Both the District and the local NRCS office also provide technical assistance for eight-year program projects. Once the District deems the conservation project necessary and feasible, applications are forwarded to the New Jersey State Soil Conservation Committee (SCC), which recommends projects to the SADC for funding approvals. Traditionally, 50% of the costs of approved soil and water conservation projects are paid with grant funds, but up to 75% have also been approved in the past. It is important that a permanent source of funding be put in place to ensure that farmers can continue to participate in these beneficial programs.

2. SADC Deer Fencing Grant Program

Farmers can apply to the SADC at any time for cost-sharing grants for the installation of high-tensile woven wire deer fencing on permanently preserved farms. Farmers who are successful in their applications can cover up to 50% of the cost of materials and installation. Assistance for this program is capped at \$200/acre or a total grant amount of \$20,000. Program Contact:¹⁴⁷

SADC: David Clapp or David Kimmel
Phone, Email: 609-984-2504, sadc@ag.nj.gov

3. Federal Conservation Programs

Farm Bill Programs

The Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) was landmark legislation, with much of its focus on conservation funding and environmental issues. Conservation provisions were designed to assist farmers in being good stewards of the land through grants and technical assistance. Since 2002, the U.S. legislature has drafted and instituted new Farm Bill programs in 2008, 2014, and 2018. Voluntary programs relevant to New Jersey, and Warren County, included the Conservation Reserve Enhancement Program (CREP), Conservation Innovation Grant Program (CIG), Environmental Quality Incentives Program (EQIP), Farm and Ranch Land Protection Program (FRPP), Grassland Reserve Program (GRP), Wetlands Reserve Program (WRP), and Wildlife Habitat Incentives Program (WHIP). (*Conservation Programs*)¹⁴⁸ These programs were continued under the Food, Conservation and Energy Act of 2008 (2008 Farm Bill). Later in 2014 and 2018, these programs were renewed with the most recent legislation being The Agricultural Improvement Act of 2018 (2018 Farm Bill).¹⁴⁹ The 2018 Farm Bill will be active until 2023. As in the past, these programs are administered by the local NRCS office in Hackettstown, and the Upper Delaware SCD.

In 2014, the Farm Bill repealed the 2008 Average Crop Revenue Election (ACRE) program. This voluntary program provided payments when revenues fell below established levels. In 2014, the

USDA Farm Service Agency (FSA) replaced the ACRE program with two new programs: Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC), which are continued through the 2018 Farm Bill.¹⁵⁰ These programs, “*pay producers who have eligible historical base acres when prices and/or yields of covered commodities fall below a certain amount, regardless of their current planting decisions.*”¹⁵¹ Since a significant acreage of field crops such as corn and soybeans are grown in White, and are also covered commodities under these programs, such a revenue support system may well have a positive effect since it would help specialty crops and niche markets receive their fair share of payment support.

The 2018 Farm Bill, in effect since December 2018, made minor changes regarding conservation programs administered by the Natural Resources Conservation Service (NRCS) and the Farm Service Agency (FSA). Some highlights include:

- Increasing mandatory funding for conservation programs by about 2 percent from 2019-2023
- Increasing Conservation Reserve Program (CRP) acreage cap from 24 million acres to 27 million acres by 2023
- Continuing the Conservation Stewardship Program (CSP), but at a reduced funding level, and replacing an acreage cap with a funding cap.
- Increasing funding for the Environmental Quality Incentives Program (EQIP), the Agricultural Conservation Easement Program (ACEP), and direct funding for the Regional Conservation Partnership Program (RCPP)¹⁵²

These programs are the backbone of natural resource conservation efforts in Warren County and its municipalities, including White. More details and programs are found at: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/>.

Conservation Reserve Program (CRP)

The CRP is a land conservation program where farmers enroll on a volunteer basis to remove environmentally sensitive land from agricultural production. In exchange, participating farmers plant species that improve the environmental health of the land and receive a yearly rental payment. The contract period is between 10-15 years.¹⁵³

Conservation Reserve Enhancement Program (CREP)

The NJ CREP program is an offshoot of the CRP and establishes a partnership between the USDA and the state to address environmental impacts related to agricultural practices. In exchange for removing environmentally sensitive lands from production, and introducing conservation practices, agricultural landowners are paid an annual rental rate. Like CRP, farmers enter in a voluntary contract for 10-15 years. This program targets 30,000 acres of agricultural lands throughout the state, requesting \$100 million in federal funds and a state match of \$23 million over the life of the program. 100% of the cost is paid to establish the conservation practices and annual rental and incentive payments to the landowner.¹⁵⁴

Environmental Quality Incentive Program (EQIP)

EQIP is a voluntary conservation program that offers financial and technical assistance to implement conservation practices on eligible agricultural land.”¹⁵⁵ Opportunities include:

- Funding opportunities for beginning farmers
- Financial assistance to help agricultural producers and forest owners address specific natural resource concerns
- Financial assistance to install high tunnels (similar to hoop houses) to protect high-value crops
- Soil health initiative to provide technical and financial assistance for soil conservation practices¹⁵⁶

As of 2014, portions of the Wildlife Habitat Incentives Program (WHIP), which was not reauthorized in the 2014 Farm Bill, have been folded into the EQIP program; anyone interested in applying for wildlife projects should apply through the Working Lands for Wildlife (WLFW) (see below) initiative through EQIP.

EQIP is the most popular and widely used conservation program in Warren County. In Warren County, there were 1,285.70 contracted acres, with 16 contracts in 2019. These contracts totaled \$141,205.36 (amount available, not paid out). While some farms in White may be assisted through EQIP, the number of farms enrolled is not tracked on a municipal level.¹⁵⁷

Conservation Innovation Grants (CIG)

Funded by EQIP (see above), the aim of the CIG is to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production. Funds are awarded as competitive 50-50 matching grants to non-governmental organizations, tribes, or individuals for projects with a one- to three-year duration. Each year, the NRCS announces a new round of competitive grants; North Jersey RC&D was the most recent Warren County recipient of such a grant in 2019 worth \$74,995 to assess the use of short season variety corn and soybeans to facilitate adoption of multi-species cover crop.¹⁵⁸

Conservation Stewardship Program (CSP)

The CSP, initiated in 2007, is a voluntary conservation program that provides technical and financial assistance to manage and maintain existing conservation systems, implementing additional conservation activities on land currently under production. CSP Provides two types of payments through five-year contracts: annual payments for installing new conservation activities and maintaining existing practices; and supplemental payments for adopting a resource-conserving crop rotation. Participants earn payments for conservation performance – the higher the performance, the higher the payment. Minimum annual payments amount to \$1,500. Participants can apply for renewal at the end of the five-year contract. The local NRCS administers this program.¹⁵⁹

Working Lands for Wildlife (WLFW) Program

Administered by the local NRCS, WLFW provides technical and financial assistance to agricultural producers to assist the implementation of conservation practices that benefit target species and priority landscapes. White is situated in focal areas for one out of three target species in New Jersey, the American Black Duck. The township's placement within this focal area provides an advantage to White's WLFW applicants who will receive high consideration.¹⁶⁰

Agricultural Conservation Easement Program (ACEP)

In 2014, the Farm and Ranch Land Protection Program (FRPP) was repealed and consolidated into the ACEP. Administered by the local NRCS, the ACEP merges three former programs – Wetlands Reserve Program (WRP), Grassland Reserve Program (GRP), and Farm and Ranch Land Protection Program (FRPP). It has two components:

- Agricultural Land Easements – prevents the loss of working agricultural lands to non-agricultural uses. NRCS may contribute up to 50% of the fair market value of the easement.
- Wetland Reserve Easements – provides habitat for fish and wildlife and improves water quality through restoration and enhancement and may provide opportunities for limited recreational activities. There are two types available in New Jersey: permanent (100% of the value and 50-75% of restoration costs) and 30-year easements (50-75% of the value and of the restoration costs).¹⁶¹

In February 2021, the USDA released a final rule to update ACEP as directed by the 2018 Farm Bill. This update incorporates public comments and makes minor changes improving the processes in place to protect ecologically important lands.¹⁶²

Regional Conservation Partnership Program (RCPP)

RCPP was introduced in the 2014 Farm Bill, and significant changes were made in the 2018 Farm Bill. This program encourages partnerships to implement solutions to conservation challenges. Partnerships can be formed by agricultural producer associations, farmer cooperatives, municipal entities, and non-government organizations. Significant changes that were made in 2018 to RCPP are:

- RCPP is now a standalone program with its own funding of \$300 million annually. Moving forward, landowners and ag producers will enter RCPP contracts and RCPP easements.
- Enhanced Alternative Funding Arrangement provision – NRCS may award up to 15 AFA projects, which are more grant-like and rely more on partner capacity to implement conservation activities.
- Three funding pools reduced to two – the National pool was eliminated. Partners must apply to either the Critical Conservation Area (CCA) or State/Multistate funding pool.
- Emphasis on project outcomes – all RCPP projects must now develop and report on their environmental outcomes.¹⁶³

Partnerships must apply for a project grant on a competitive basis during the grant applications period. There are two funding categories: critical conservation areas (CCA) (NJ does not fall within one of these eight areas) and state/multi-state. To apply for state funding, the project must address at least one of the national or state priorities of soil erosion, soil quality, water quality, and wildlife habitat. In April 2020, the NRCS announced investment in 48 projects totaling \$206 million; none of these projects reside in New Jersey. The most recent deadline for project proposals was May 29, 2020. The most recent New Jersey projects that were awarded funding were in 2018:

- Columbia Dam Removal and Restoration on Paulins Kill (\$567,000) – Plan to remove the Columbia Dam and a downstream remnant dam to restore and reconnect habitat for diadromous fish species.
- Black River Gateway – Soil and Water Protection (\$922,000) – Plan to preserve farms in the Black River.¹⁶⁴

C. Water Resources

1. Supply Characteristics

The necessity of clean and plentiful water, and its precariousness, is clearly stated in the *2005 Warren County Strategic Growth Plan*. The Plan indicates that “Groundwater and surface water quality in Warren County is generally good. Groundwater accounts for all drinking water in the county. While groundwater quality is good, there are some areas identified for actual or potential well contamination.” (*2005 Warren County Strategic Growth Plan*)¹⁶⁵ Some potential contamination sources are pesticides, which are used in agriculture and at private residences, and underground storage tanks for various substances such as gasoline and diesel fuel. Underground storage tanks are sometimes used on farms as fuel sources for equipment. (*2005 Warren County Strategic Growth Plan*)

In addition, the *2018 Warren County Open Space Plan* indicates the importance of agriculture to the water resource by stating, “Sixty percent of Warren County is deep, non-stony soil, well suited for farming and community development etc. These areas also provide scenic vistas and watershed protection. Agricultural landowners should be encouraged to participate in the *Farmland Preservation Program*, to help ensure the viability of agriculture as a land use and economic activity while preserving them as open or undeveloped land areas. The remaining 40 percent is soil so stony, steep, shallow or wet that it is not suited for development.” The Plan also states that “Areas designated for open space can protect many natural resources, such as the quality and quantity of surface and groundwater, cultural and historic areas, and view sheds associated with ridge tops.”¹⁶⁶

2. Agricultural Demand & Supply Limitations

Agricultural lands according to the *New Jersey Farmland Assessment* are divided into main categories of: Cropland Harvested, Cropland Pastured, Woodland, Equine, Renewable Energy, and Permanent Pasture. The most recent assessment in 2019, listed White’s total agricultural acreage at 8,285. About 45% of this total is harvested cropland, land that requires the most amount of water for production. This comprises about 9% of Warren County’s total harvested acres.

White’s water demand for agricultural use stems primarily from the production of water-intensive crops such as alfalfa, corn, and soybeans, which comprise about 98% of the field crops grown in the Township. However, because of the region’s climate, none of the township’s field crops are labeled as irrigated.

Both population increases and agricultural irrigation can affect White's water supply. From 2015 to 2017, White experienced an increase of about 38% in total irrigated acres.¹⁶⁷ County data suggests that climate conditions or shifts in production contributed to the overall decline in irrigation, reducing the pressures on water sources caused by this activity. In terms of population pressures, data indicates that the rate of permits is slowing in White. However, overall increased pressure from development and the concomitant demands on water supplies are being felt by Warren County farmers. Increased development exacerbates water supply concerns, not only by increased water usage from occupants of the units, but also by creating more impervious surface, causing more stormwater runoff (which often washes pollutants into waterways) and less opportunity for aquifer recharge. Lack of sufficient water recharge areas can compromise soil conditions and means less water stays in the area and flows away to other areas, such as the river, the bay, and the ocean. Disturbing the balance of water distribution can adversely impact the region and all other areas that may be disturbed by the fluctuations in natural water distribution.

3. Water Conservation and Allocation Strategies

An adequate water supply is integral to successful agriculture operations in White. Droughts in recent years have highlighted the precarious nature of the agriculture (and general) water supply, and the need for water conservation systems and regimens. Historically, from 2008 to 2018, dry conditions occurred with greater frequencies than in years prior.¹⁶⁸

The NJDA, through its *Agricultural Smart Growth Plan*, encourages farmers to:

“...work to accelerate the use of efficient water conservation technologies, such as drip irrigation. Identify and promote new and efficient methods to conduct water distribution on farms, utilizing farm ponds and water reuse options.” (2006 Agricultural Smart Growth Plan)

The dominant crops in White are hay, corn, and soybeans. These crops rely on rain and some groundwater for water needs, making water conservation strategies difficult to implement. For the more water intensive nursery, greenhouse and produce farming, it is possible to implement conservation strategies such as drip irrigation, water reuse, or watering crops in the cooler parts of the day. However, since vegetable, fruit, and nursery agriculture are minor to hay, corn, and soybeans, the positive effects, and opportunities of water conservation efforts for the Township are minimal. Increased irrigation practices are linked almost exclusively to the rise in these popular field crops. For example, total irrigated acres in White increased 80% from 10 acres in 2006 to 18 acres in 2017. In the same 11-year period, no acres of field crops were irrigated. (2017 *Farmland Assessment*) As such, water conservation strategies may become more important, and should be maximized where possible.

Seasonal differences in water demand combined with such occurrences as drought, changes in land cover and other natural or manmade circumstances can influence water supply from which an ecosystem cannot easily recover. White falls in the scope of the Highlands Act and so has access to water resource analysis. White can also benefit from being aware of the analyses done for neighboring communities within the Highlands, such as Hope and Frelinghuysen, and the use of monitoring stream base flows as a measure of water sustainability, using the severity and

duration of low flow to understand impacts of water use on ecosystem and water supply, as well as the need to protect ground water recharge areas, which are susceptible to variations in soil, land cover and precipitation.¹⁶⁹

The NJDA encourages farmers to implement water-management practices as a routine part of their conservationist approach to agriculture. The faculty of NJAES-RCE publishes annual crop production recommendation guides for multiple crop groups that include irrigation guidelines and recommendations. These guides include tips for maximizing irrigation efficiency, such as optimizing irrigation scheduling, selecting appropriate growing mediums, planning, and installing irrigation systems that provide efficient water use, managing stormwater runoff, and collecting and recycling irrigation water. The information can be found at <https://njaes.rutgers.edu/pubs/>. Farmers can use floats and timers to eliminate the needs for constantly running water to keep troughs full for livestock.

The Office of the New Jersey Climatologist at Rutgers University, School of Environmental and Biological Sciences, operates the NJ Weather and Climate Network of weather monitoring stations. Farmers can use the information from stations near them to assist with irrigation scheduling, as well as pest management and other conservation issues, temperature, precipitation, wind speed and gusts. Other stations measure barometric pressure and New Brunswick measures soil temperatures as well. Farmers can set favorite locales and view charts and tabular data.¹⁷⁰

D. Waste Management Planning

Livestock farmers in White may opt to participate in SCD/NRCS conservation programs that cost share the creation of animal waste facilities on their farms. By building these temporary holding tanks, usually concrete, the farmer accomplishes two purposes: preventing the waste from mixing with runoff and polluting streams and other water bodies and providing a ready source of manure or fertilizer for farm fields. When convenient, farmers can remove the waste from the temporary storage facilities and apply it to the fields, following best management practices (BMPs).¹⁷¹

Animal Waste

Rising trends in White Township land use for equine and pasture purposes from 2010 to 2019 support that waste production from horses and cows supported by these acres, makes animal waste management a continuous focal point of conservation practice in the Township.¹⁷²

Horse waste on farms can be a problem due in part to the relatively small land area of horse farms, making the manure more difficult to distribute on fields effectively and safely. This can contribute to the spread of disease from the manure if not controlled. For dairy farms, however, manure concentration and distribution are less of a concern because of the relatively large land area dedicated to those operations assuming that manure is managed and applied in an appropriate manner and in accordance with New Jersey state regulations.¹⁷³

Many farmers have “Nutrient Management Plans” to manage the manure generated on their farms. Nutrient Management Plans contain information on crop requirements, nutrient

availability, proper timing and amounts of application, and environmental considerations. Such plans require farmers to have a good understanding of crop requirements, soil types and sensitive areas on/near the farm (such as wetlands and shallow aquifers); nutrient management incorporates this knowledge with site-specific sets on management practices.¹⁷⁴

For livestock waste disposal services, Ag Choice LLC in Andover, Sussex County, picks up, accepts, and composts food and livestock waste on a commercial scale. It is then available as bulk pickup, sold to landscapers and garden centers, or bagged and sold at retail outlets. This type of operation not only helps control the problem of livestock waste on farms but is also a good revenue source for the owners. Warren County farmers can review the Ag Choice operation to determine if similar operations might be beneficial to them. The Ag Choice website is <http://www.ag-choice.com>.

Animal Feeding Operations

Animal feeding operations (AFOs) have the potential to cause water pollution since mismanagement of the animal waste can lead to soil and groundwater contamination via introduction of organic matter, nitrogen, phosphorus, and bacterial pathogens into nearby surface waters. Proper management is essential. The NJDEP has outlined a statewide strategy to manage and regulate these operations. The strategy calls for NJDEP to administer permits for the few, large Concentrated Animal Feeding Operations (CAFOs) in the state, and the NJDA to administer appropriate measures for other farms with animals, using the Criteria and Standards for Animal Waste Management, adopted March 16, 2009. This strategy emphasizes the use of cost-effective voluntary measures, limiting the need for permits.¹⁷⁵

The Criteria and Standards for Animal Waste Management (N.J.A.C. 2:91), which went into effect on March 16, 2009, set forth requirements for the development and implementation of self-certified Animal Waste Management Plans (AWMPs), high-density AWMPs and Comprehensive Nutrient Management Plans (CNMPs) for farms that generate, handle, or receive animal waste. All existing farms must implement the General Requirements of the rule within 12 months of the effective date, and new farms within 12 months of meeting the 1 to 7 Animal Unit (AU) Threshold. All producers, regardless of size, must meet the general requirements, which are:

- 1) *“With the exception of aquatic farms, no farm shall allow livestock in confined areas to have access to waters of the State unless such access is controlled”* as determined by the NJDA BMP Manual.
- 2) *“Manure storage areas shall be located at least 100 linear feet from surface waters of the State, measured perpendicular to the watercourse from the top of bank outwards. Manure storage areas shall be designed to eliminate direct point source discharges to waters of the State except for stormwater discharges to surface water that occurs above a 25-year, 24-hour storm event.”*
- 3) *“Land application of animal waste shall be performed in accordance with the principles of the NJDA, Best Management Practices (BMP) Manual Part IV.”*
- 4) *“No livestock that have died from a reportable contagious disease listed in N.J.A.C. 2:2-1.1 or as a result of an act of bio-terrorism shall be disposed of, composted or made part of any land application without first contacting the State Veterinarian. In addition, no animal waste associated with livestock that have died from a reportable contagious disease listed in N.J.A.C. 2:2-1.1 or as a result of an act of bio-terrorism shall be disposed of,*

composted or made part of any land application without first contacting the State Veterinarian.”

- 5) *Any person entering a farm to conduct official business related to these rules shall follow bio-security protocol” set forth in N.J.A.C. 2:91 (Criteria and Standards for Animal Waste Management).*¹⁷⁶

Additional requirements are either voluntary or mandatory, depending on the number and density of animals. Generally:

- Operations with 7 or fewer animal units (AU=1,000 pounds) or receiving or applying less than 142 tons of animal waste per year are encouraged, but not required, to develop a self-certified Animal Waste Plan (AWMP);
- Operations with 8 to 299 AUs with densities of less than 1 AU per acre are required to complete a self-certified AWMP;
- Operations with 8 to 299 AUs at densities greater than 1 AU per acre are required to complete an AWMP, which must be reviewed by a conservation professional;
- Operations receiving or applying 142 or more tons of animal waste per year are required to develop a self-certified AWMP; and
- Operations with 300 or more AUs are required to have a CNMP developed, which must be certified by the NJDA.

In general, self-certified waste management plans will be coordinated through NJAES-RCE, which continues to aid farmers who have not yet completed AWMPs or implemented environmental BMPs on their farms. Farmers can apply for funding through Environmental Quality Incentive Program (EQIP) to obtain a CNMP for their operation. Any livestock operation receiving EQIP funds for waste management practices such as a Heavy Use Area Protection (HUAP) site or waste storage facility must have a Comprehensive Nutrient Management Plan (CNMP). NRCS can assist producers with the development of a CNMP which in turn can be used as guide for implementing waste management practices in the future. These plans are developed with the assistance of a Technical Service Provider (TSP).¹⁷⁷

Recycling

Recycling should be an important part of natural resource conservation for the agriculture industry. Recycling saves natural resources, and can save farmers money through creative reuse, such as using leaves and grass clippings to mulch and fertilize farm fields and saving on solid waste disposal costs. Recycling reduces the amount of refuse finding its way to limited landfill space. Hay, corn, and soybeans, the dominant farm products by acreage in White, use limited products that can be recycled, and as such limit recycling opportunities. Although nursery and produce make up a small part of White’s agricultural operations, there still is a need to provide outlets for recyclable waste from these operations.

The following are the recycling facilities available to White farmers:

- Warren County Recycling Center – 500 Mt. Pisgah Avenue, Oxford, 908-453-2174. This facility is open to all Warren County residents and accepts #1-#7 plastics in addition to glass bottles and jars and aluminum, tin, steel, and bimetal cans.¹⁷⁸

- The Recycling Center of North Jersey – 48 Hope Road, Blairstown, 908-362-1255. This facility accepts comingled glass and plastics, all types of metal, aluminum, and more.¹⁷⁹

Warren County considers tire recycling an important component to preserving its pastoral beauty. White farmers can contribute to and benefit from this mission by accessing the various low-cost options provided by the Pollution Control Financing Authority of Warren County (PCFAWC). Farmers can bring their recyclable tires to:

- Warren County District Landfill – 500 Mt. Pisgah Avenue, Oxford, 908-453-2174. This facility accepts tires on a “daily basis” between 8:00 am – 3:30 pm. Proof of Warren County residency is required. Charges range from \$2.50 for each automobile tire up to 22” to \$10.00 for each farm equipment tire up to 50”.¹⁸⁰

Other local tire facilities, such as Mavis Discount Tires, do not accept larger farm-equipment tires, therefore White farmers should use the option provided for PCFAWC for their tire-recycling needs. In the past, Warren County has organized “Tire Amnesty Day,” which provided opportunities for farmers to dispose of their used tractor tires for free.¹⁸¹

For other farm-oriented recyclables, the NJDA website lists resources for agricultural recycling. Programs listed include options for nursery and greenhouse film, pesticide containers, nursery pots, plug trays, and flats, and mulch film and irrigation tape. Some of these services are free, and others come at a cost to the farmer.¹⁸²

E. Energy Conservation Planning

In general, White Township looks to the County and the State for leadership, direction and help in the areas of energy management. Energy conservation makes economic sense for White agriculture businesses. Reducing energy consumption can result in economic savings that can be invested elsewhere or realized as profit.

The goal of reducing greenhouse gases in New Jersey and Warren County is indicated in the Regional Greenhouse Gas Initiative (RGGI), a compact signed by the Governors of ten states, including New Jersey. As part of RGGI, the potential trading of carbon credits between energy companies and farmers can offer financial incentives for farmers to utilize processes that minimize carbon dioxide production. The first quarterly RGGI CO₂ auction took place on March 11, 2020.¹⁸³

In January 2010, P.L. 2009, c.213, was enacted to allow for the construction, installation, and operation of biomass, solar, or wind energy generation facilities, structures, and equipment on commercial farms, including preserved farms, with certain caveats regarding interference with agricultural productivity, valuation for farmland assessment, amount of farm acreage that can be devoted to such facilities, local and State approvals)¹⁸⁴

In 2019, Governor Phil Murphy signed the Updated Global Warming Response Act seeking to reduce greenhouse emissions 80% by 2050. Green energy policy is also echoed in Governor Murphy’s Energy Master Plan, in which, the state seeks to transition to 100% clean energy by

2050.¹⁸⁵ White farmers can take advantage of this initiative by applying for the financial incentives to implement energy efficient improvements to their farms and operations. One example of these financial incentives is the Rural Energy for America Program (REAP) which funds grant and loan guarantees to agricultural producers for assistance in purchasing renewable energy systems. Renewable energy systems include generation from the following ways: biomass, geothermal, hydropower, hydrogen, wind, and solar.¹⁸⁶

The NRCS also has the authority to use EQIP to implement Agricultural Energy Management Plans (AgEMP) to address concerns of energy conservation. As a part of the EQIP On-Farm Energy Initiative, these plans are designed to evaluate energy use and efficiency within farming operations. These energy audits can qualify a farmer for financial assistance to implement recommendations of the process if the audit meets the proper time and standard requirements. This plan is implemented to assist the landowner's goals of achieving cheaper and more efficient energy consumption.¹⁸⁷

The EQIP natural resource conservation program pays for some energy production programs, such as replacement of older, dirty polluting working diesel engines, with newer, more efficient, cleaner burning diesel engines that will meet EPA Tier requirements for the program year. Farmers should check the NRCS website regarding this program since requirements may change from year to year.¹⁸⁸ The New Jersey Board of Public Utilities offers rebates for solar electric, wind, and sustainable biomass systems if funding is available.

Solar Energy

The SADC does allow solar generating facilities on preserved farms, and rules for these installations are contained in Subchapter 24 of Chapter 76.¹⁸⁹ Solar generating facilities are also allowed on unpreserved farms and the SADC has provided AMP (agricultural management practices) for these facilities.¹⁹⁰ A summary of the policies aligned by both the subchapter and the AMP is given below:

- Solar panels (solar energy general facilities) are allowed on commercial farms (preserved and unpreserved).
- Panels cannot be constructed/installed on prime farmlands (to maximum extent practicable).
- The SADC prefers they be constructed on buildings or facilities; if on the ground, they are to be installed without concrete footing or permanent mounting.
- Facilities cannot exceed more than 1% of the total farm area.
- Purpose of the facilities must be to provide energy for the farm, with an allowance for income opportunity for farmers.
- System cannot exceed height of 20 feet.
- Must minimize views from public roadways and neighboring residences.
- Facilities must use existing roadways to provide access to facilities to avoid construction of new roadways.

EQIP provides cost-share funding for solar livestock watering facility as part of a grazing system. Special rates are available to qualified farmers. In 2018, two contracts were planned and

applied, but in 2019 no contracts were developed. White Township farmers interested in using this alternate energy source can contact the local NRCS office in Hackettstown for more information.¹⁹¹

Wind Energy

According to the NJDA, the northwest part of New Jersey, which includes Warren County, has ample and consistent enough wind power to make turbine energy feasible. New Jersey and White farmers might take advantage of a distributed or “small” wind system, which uses turbines of 100 kilowatts or smaller to directly power a home, farm, or small business. New Jersey’s Clean Energy Program provides a model small wind ordinance for municipal adoption. Although this is a first step toward encouraging wind energy, New Jersey’s Clean Energy Program incentives for wind energy installations have been on hold since 2011.¹⁹²

White’s zoning regulations do not currently address wind turbines. However, with New Jersey and Warren County’s growing wind program, White may be willing to consider alternative energy sources.

Incentives and Assistance for Terrestrial and Small Wind Systems include the Renewal Energy Incentive Program (REIP) and the Anemometer Loan Program, administered by Rutgers and four other NJ universities. The program is funded by the United States Department of Energy Wind Powering America Program and funds provided by the NJ Board of Public Utilities Office of Clean Energy Program. By measuring wind power at the target location, the anemometers help determine the economic feasibility for wind turbine installation. Target market includes municipalities, farms, residential and small commercial customers. Both Rutgers and Rowan University have waiting lists for anemometer loans. Currently, anemometers are installed on farms as close to White as Hackettstown and Long Valley.¹⁹³

Biopower

Starting in 2017, biopower projects are incentivized through the Combined Heat and Power Program (CHP). Program participants are eligible to receive financial incentives for CHP installations to further enhance energy efficiency in their buildings through on-site power generation and using distributed generation to provide reliability solutions for New Jersey while supporting the state’s Energy Master Plan. White farmers can find the program eligibility requirements and the program’s financial incentives in the CHP-FC Program Guide.¹⁹⁴

Ethanol and Pelletized Switchgrass

Corn, the most dominant field crop in White, could position the Township’s farmers to financially capitalize on the spreading movement towards ethanol-blended fuels. More study would need to be done on whether this would be profitable for farmers, and how it would affect other local agriculture industries.

In addition, interest has been shown in utilizing switchgrass to make energy producing pellets. This could add another market for White farmers, and another source of clean energy. Switchgrass pellets can replace oil, gasoline, or coal as fuel to heat greenhouses, save money, reduce petroleum use, and cut greenhouse gas production in the process.¹⁹⁵

Biodiesel

Countywide, soybean production has nearly doubled since 2011, from 221,000 bushels to 430,000 bushels in 2015 (NASS). Warren County leads northern New Jersey in soybean production. White, based on 2017 totals, is an average soybean producer in Warren County and therefore can utilize its soybean production to maximize the benefits of its third largest field crop. While no bio-diesel producers are available nearby, several retailers operate within the region, including:

- Dixon Energy – 99 Cobb St. Rockaway, NJ, 973-334-1000
- Wooley Fuel Co. – 12 Burnett Ave. Maplewood, NJ, 973-762-7400
- Quarles – 1046 N Godfrey St. Allentown, PA, 877-444-3835¹⁹⁶

Biogas

In 2020, New Jersey ranked 30th nationwide in biogas production. Out of 59 operational systems, down from 62 in 2015, 22 are landfill systems and 32 are wastewater systems, and five are food waste systems. Increasing biogas operations can lead to economic opportunity through job creation and environmental benefits through reducing greenhouse gasses.¹⁹⁷

Renewable Energy Grant Programs

New Jersey's Clean Energy Program: Administered by the New Jersey Board of Public Utilities, this program provides financial incentives to install clean energy systems, including fuel cells, solar energy, small wind and sustainable biomass equipment. Financial incentives are in the form of rebates, grants, energy certificates and loans. Additional information is at <https://njcleanenergy.com>.

Renewable Energy Incentive Program (REIP): This program previously offered funding assistance for solar, wind, and sustainable biomass installations. Currently, this program is on hold for wind systems. Solar projects are no longer eligible for REIP incentives. Those who sought assistance for solar projects used to register for Solar Renewable Energy Certificates (SREC) through the SREC Registration program (SRP).¹⁹⁸ Since the Spring of 2020, those who seek to register solar projects do so through the Transition Incentive Program (TI).¹⁹⁹

Anemometer Loan Program: administered by five New Jersey universities, provides a way for prospective locations to test the potential for wind power production and assess its economic feasibility.²⁰⁰

New Jersey Smart Start Buildings: Operated by the New Jersey Board of Public Utilities, this program is a statewide energy efficiency program available to qualified commercial, industrial, institutional, governmental, or agricultural customers that seek to change their electric or gas equipment.²⁰¹

USDA Rural Energy for America Program (REAP): Reauthorized under the Agricultural Improvement Act of 2018 (2018 Farm Bill), the REAP program provides guaranteed loan financing to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements.²⁰² For agricultural producers, a guaranteed loan and grant program can provide financial assistance with the installation of renewable energy systems.

Advanced Biofuel Payment Program: This program aims to increase the production of advanced biofuels. Quarterly payments are distributed to participants for actual quantity of eligible advance biofuel production. An advanced biofuel is a fuel that is derived from renewable biomass, other than corn kernel starch. Biofuels that may be specific to White farmers are those derived from waste material such as crop and animal wastes. More information can be found here: https://www.rd.usda.gov/sites/default/files/fact-sheet/508_RD_FS_RBS_AdvancedBioFuel.pdf.²⁰³

Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program: This program provides loan guarantees up to \$250 million to assist the development of new and emerging technologies. These technologies include advanced biofuels, renewable chemicals, and biobased products.²⁰⁴

F. Outreach and Incentives

The Township's AAC is committed to working with the Warren CADB, the State, and regional agencies to assist in outreach and education to farmers and landowners regarding natural resource conservation and agricultural productivity. White Township looks to the County, State and regional agencies for leadership, direction, and help. The White AAC will continue to work with the Warren CADB to implement programs to aid in natural resource conservation on farms in the Township.



Chapter 8. Agricultural Industry, Sustainability, Retention, & Promotion

A. Existing Agricultural Industry Support

1. Right to Farm

In 1983 the State Legislature enacted the Right to Farm Act (RFA) and amended it in 1998, ensuring that farmers can continue accepted agricultural operations. Another critical piece of legislation in support of agriculture was the 1983 Agriculture Retention and Development Act. This Act created the SADC, and authorized counties to create CADBs.²⁰⁵

The SADC works to maximize protection for commercial farmers under the RFA by developing AMPs, tracking right-to-farm cases, offering a conflict resolution process, and reviewing rules proposed by other state agencies for the impact they may have on agriculture. To qualify for right-to-farm protection a farm must meet the definition of a “commercial farm” in the RFA; be operated in conformance with federal and state law; and comply with AMPs recommended by the SADC, or site-specific AMPs developed by the Warren County CADB at the request of a commercial farmer.²⁰⁶

As of 2020, the SADC had 12 AMPs in place, the latest, an AMP for On-Farm Direct Marketing Facilities, Activities and Events, adopted April 7, 2014. The SADC lists 15 site-specific AMPs for Warren County, all of which the Warren CADB resolved.²⁰⁷

All right to farm (RTF) complaints or issues that are brought before the Warren CADB are first handled with fact finding and efforts to resolve differences between the parties. The mediation can be informal, or, if the parties agree, the SADC will provide mediation or conflict resolution at no cost to the participants through its Agricultural Mediation Program. If a formal complaint is filed with the Warren CADB, it is sent to the SADC for a determination as to whether the farm qualifies as a commercial farm (N.J.S.A. 4:1C-3) and whether the operation or activity is eligible for right-to-farm protection. The CADB and/or SADC typically conducts a site visit for additional fact finding, sometimes consulting with agricultural experts and municipalities (in cases where municipal regulations are involved in right-to-farm disputes. Depending on the nature of the issues, either the CADB or SADC (or both in some cases) holds a public hearing at

the county level. Decisions made by the Warren CADB may be appealed to the SADC, and final SADC determinations may be appealed to the New Jersey Superior Court, Appellate Division.²⁰⁸

Municipalities can and should limit the number of RTF complaints and encourage farming as an industry by:

- Working to better understand the RTF process to adopt or update comprehensive RTF ordinances as outlined by the SADC.
- Making agriculture a permitted use in all appropriate zones.
- Requiring buffers between new non-agricultural development and adjacent existing farmlands.
- Requiring notification to homeowners purchasing a home in a new subdivision where active agriculture occurs on adjacent property.

RTF ordinances are a necessary item for municipalities that enter the Farmland Preservation Program. White established its RTF Ordinance (Chapter 217) in August 1997. (**Appendix C**)

The Ordinance states that its purpose is to *“conserve, protect and encourage the development and improvement of agricultural lands within the township for the production of food and other agricultural products and the preservation of open space and to protect and encourage the viability of the agricultural industry by establishing a positive agricultural business climate in order to promote agricultural production to serve the interests of all citizens of White Township.”*

To protect its farmers the White Township RTF in various instances, requires a statement on deeds for properties in or around farmland that states, in part: “The grantee hereby acknowledges notice that there are presently or may in the future be farm uses adjacent or near the above-described premises. The grantee further acknowledges that the Township of White has adopted a Right-to-Farm ordinance establishing acceptable farming activities which may result in the emanation of noise, odors, dust and fumes caused when such activities are conducted in accordance with recognized agricultural practices. The grantee further acknowledges that such activities may occur on holidays, weekends, and at all times of the day, including early morning, evening, and nighttime hours. By acceptance of this conveyance, the grantee does hereby waive objection to such activities.”

The White RTF Ordinance specifically recognizes the right of a farmer to perform the following activities (however other accepted agricultural practices may also be included):

- Irrigation, drainage and water management.
- Application of chemical fertilizers, insecticides and herbicides.
- Soil preparation and management.
- Grazing of animals.
- Production, harvesting, storage, grading, packaging, and processing of agricultural products.
- Marketing of crops, plants, animals and other related commodities.
- Disposal of farm waste.

- Conduct agricultural operations on holidays, Sundays, and in the evenings.
- Produce noise, odor, dust, and fumes that are caused by agricultural activities.

White’s RTF Ordinance does not specifically list some of the suggested activity rights in the SADC Model Right to Farm Ordinance. These include:

- Housing and employment of farm laborers
- Erection of essential agricultural buildings
- Construction of fences
- Conduction of agriculture-related education and recreation activities
- Farm-market and pick-your-own signage
- Clearing of woodlands using open burning and other techniques; installation and maintenance of vegetative and terrain alterations for water and soil conservation and surface water control in wetland areas
- Operation and transportation of large, slow moving farm equipment over municipal roads
- On-site disposal of organic agricultural wastes
- Installation of wells, ponds, and other water resources
- Engage in renewable energy (biomass, solar, wind) ²⁰⁹

It does not mention the Agricultural Mediation Program, which is a process where an impartial mediator can help disputing parties solve issues. This program was established by the State Agricultural Development Committee as a voluntary process to examine mutual problems, identify and consider options, and come to a solution.

The Township may wish to specifically include some of these other activities as protected in its ordinance, especially regarding transportation of large, slow moving farm equipment. White’s Township’s AAC can help avoid or minimize RTF conflicts by making farmers and other residents aware of the provisions in the Township’s code and by having an open-door policy that allows those with issues to talk informally with a member or members of the AAC or Township officials to try to resolve issues before engaging the formal processes of appeals to the Warren CADB or the SADC. Although Township officials feel the current RTF Ordinance and other Township code meets their needs, the OSFC take advantage of opportunities in the Township’s planning process to promote strengthening of the RTF ordinance, as appropriate.

2. Farmland Assessment

The Farmland Assessment program is a tax incentive that reduces property taxes on active commercial farmed land. This tax incentive is made possible by the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq. Its provisions were recently updated by legislation that was signed into law in 2013, becoming effective in tax year 2015. Basic eligibility requirements include:

- The applicant must own the land.
- The property owner must apply annually for Farmland Assessment on or before August 1 of the year immediately preceding the tax year, and effective as of tax year 2015, must

submit proof of sales or clear evidence of anticipated gross sales along with the FA-1 application form.

- Land must be devoted to agricultural and/or horticultural uses for at least two years prior to the tax year.
- Land must consist of at least five contiguous farmed and/or woodland management plan acres. Land under or adjoining a farmhouse is not counted towards the minimum five acres.
- Effective as of tax year 2015, gross sales of products from the land must average at least \$1,000 per year for the first five acres, plus an average of \$5.00 per acre for each acre over five. In the case of woodland or wetland, the income requirement is \$500 for the first five acres and \$0.50 per acre for any acreage over five. Dependent on the agricultural or horticultural products being produced, the farmer can also offer clear evidence of anticipated yearly gross sales, payments, or fees within a reasonable period.
- The property owner must represent that the land will continue in agricultural or horticultural use to the end of the tax year.²¹⁰

The Farmland Assessment program does not apply to farm structures, such as barns and storage facilities.

There are **8,285 acres** in White devoted to agricultural and horticultural usage. Within these 8,285 acres, 4,374 acres are in agricultural use as either cropland or pasture. The remaining 3,911 acres are woodland/wetland areas or equine boarding/rehabilitation or training operations.²¹¹

By making agriculture more profitable and viable, tax incentives will help to ensure a steady, permanent source of agricultural lands for the Township's farmland preservation efforts. The Township considers the assessment procedure as essential to continued agricultural success and supports the law in its current form.

B. Additional Strategies to Sustain, Retain, and Promote Agriculture

1. Permit Streamlining

Municipalities play a key role in the preservation of farming as an industry. Without strong and active support from municipal governments, farming can be too costly and burdensome to be profitable or worthwhile. The viability of farming in New Jersey is impacted by many issues, including government regulation, development pressures, and the economics of the marketplace. While land preservation is vital for maintaining a sufficient land base suitable for farming, sustaining White's strong agricultural base requires support on many fronts, one of which is flexibility in government regulation.²¹²

- *Positive and supportive public policy*: This includes legal protection (right to farm), priority in decisions on taxation (farmland assessment), regulation exemptions, and financial incentives (planning incentive grants).
- *Flexibility*: State agencies should consider the *NJDA Agricultural Smart Growth Plan* when making decisions regarding existing and proposed infrastructure, developing and

amending regulations and programs, and protecting environmental and historical resources. These agencies should coordinate with NJDA to ensure that regulations and programs are attuned to the needs of Warren County and White Township farmers.

- *Agriculture-Friendly Zoning*: This refers to a comprehensive land use practice that coordinates zoning and land use policy in a proactive way which encourages agribusiness, while at the same time reducing the incidence of farmer-homeowner nuisance issues.

2. Agriculture Vehicle Movement

White farmers need to move heavy, slow-moving agricultural equipment over local, county, and sometimes state roads to access unconnected fields and barns. The township's residents also need to commute to workplaces, or drive to area destinations for shopping, town sports, and social activities, at a pace much faster than the slow-moving agricultural equipment. These different transportation paces can, and do, cause conflict between White's farmers and suburban dwellers, while creating unsafe road conditions as residents and farmers "compete" for road space.

Since many farm vehicles travel over local municipal roads, municipalities should continue to support local agricultural business' right to do so. The SADC model RTF ordinance recognizes, as a specific right, the operation and transportation of large, slow-moving farm equipment over roads. The White RTF Ordinance does not specifically protect the right to transport tractors and other slow-moving equipment on local roads. The Township should consider changing their ordinance to join the other 15 Warren County municipalities that protect the movement of farm equipment on local roads.

Signage alerting fast-moving cars to the possible movement, and road crossing, of slow-moving farm vehicles is an additional, effective tool to protect farmer (and automobile passenger) safety. Signage also informs the public at large that agriculture is an important, equal, and permanent fixture of White life. Where absent or inadequate, appropriate signage can be posted. Township officials may consult with farmers as to what adequate signage is, and where it should be posted.²¹³

3. Agricultural Labor Housing/Training

An adequate labor supply is integral to harvesting vegetables, fruits, and berries. Measured in farmed acreage, White has a relatively small industry for these products compared with field crops such as hay, corn, and soybean. Harvesting of the latter farm products is more mechanized, and/or not as labor intensive as produce, with most work being done by farm family members.²¹⁴ As of 2017, only 192 acres in White Township were devoted to fruits, berries, and vegetables, while 3,507 acres were devoted to field crops and nursery products. Since the overall acreage of labor-intensive farming is small in White Township, farm labor housing, a large issue in towns and counties with high farm labor populations is, for the most part, not of high concern in the Township.

In recent years, problems that face New Jersey Employers persist as the wage (\$10.30/hour) for agricultural employers as of January 1, 2020. It is expected to increase to \$15.00/hour by 2027.²¹⁵ The cost of labor in New Jersey is a significant issue for some farming sectors such as produce, and one that needs further consideration for its effect on agriculture in New Jersey, Warren County, and White.

Agricultural Labor Housing

Since the overall acreage in White dedicated to the intensive labor is few, likewise, the demand for agricultural labor housing is scarce. The 2017 Warren County Farmland Assessment states that there are no seasonal labor housing structures in the Township.

Farmer Education and Training

To sustain a modern, diverse, and stable food and agricultural industry, education and progressive ongoing training for farmers promotes a more efficient and productive business environment.

The **NJAES-RCE** of Warren County provides one-on-one, on-site consultations with farmers to assist with control of insect infestations and plant diseases for fruits. NJAES of Warren County also provides practical assistance to farmers, such as assistance with obtaining pesticide application licenses and water certification and registration permits from the NJDEP.

The **Warren County Community College** teaches crop monitoring for precision agriculture techniques in their photogrammetry class. The College would be willing to explore the possibility of setting up college-level or continuing education courses if requested to so by the Warren CADB, or the wider agriculture community.²¹⁶

NOFA-NJ offers educational programs for farmers of all ages and skill sets, including a Beginning Farmer Program. Other educational programming includes organic gardening, permaculture design certification, business courses, technical assistance, and farm-to-table workshops.²¹⁷

Through its **Division of Agriculture and Natural Resources**, Natural Resource Conservation Program, the NJDA offers technical, financial, and regulatory assistance, and provides educational outreach to landowners throughout the state.²¹⁸

Agriculture labor education and training funding may be available through the New Jersey Department of Labor and Workforce Development Programs. These programs can help assist in upgrading the skills and productivity of the agricultural workforce.²¹⁹ The NJDA hosts a web page with links and information on Agricultural Education, geared mostly toward teachers but also listing conferences and other information of potential education interest to farmers.²²⁰

The NJFB also hosts educational meetings and provides educational information for farmers on its website about legislative issues, farmland preservation, and labor resources.²²¹

Youth Farmer Education Programs

According to the *Census of Agriculture*, the farmer population in Warren County is getting older, with an increase of 2.2 years of an average age of 59.4 in 2017 versus 57.2 in 2007.²²² The nationwide average age of operators in 2017 was 58.6, less than a one-year difference compared to Warren County.²²³ In 2017, there were 83 farmers (5.5%) out of 1,516 farmers in Warren County who were under the age of 35.²²⁴

Due to the aging farmer population, the next generation of the county's farmers needs to become interested in, and exposed to the business of agriculture, and prepared to enter the industry. At the post-secondary level, neither Centenary University nor Warren County Community College offer agriculture education courses, but Centenary University does offer programs in Equine Sciences and Equine Studies.²²⁵ Typically, students who enter programs in natural sciences (biology, chemistry, etc.) at these schools can also adapt their degree plan to include elements of business, economics, and resource management to receive a well-rounded education that can translate to practical use on White farms.²²⁶

The closest post-secondary institutions to White Township that offer programs relating to agriculture and horticulture are:

- 14 miles – Lafayette College, 730 High Street, Easton, PA.
- 19 miles – East Stroudsburg University of Pennsylvania, 200 Prospect Street, East Stroudsburg, PA.
- 23 miles – Northampton Community College, 3835 Green Pond Road, Bethlehem, PA.
- 26 miles – Sussex County Community College, One College Hill Road, Newton.
- 33 miles – County College of Morris, 214 Center Grove Road, Randolph.

Changes in the cost of attendance/financial assistance for college education in New Jersey may offer incentives for young farmers to seek enrollment in higher education. In the Spring of 2019, the state piloted the New Jersey Community College Opportunity Grant, where students may be eligible for tuition-free college.²²⁷

Future Farmers of America (FFA) is a national educational organization that helps prepare youth for careers and leadership in agriculture by aiding students in the development of agricultural skills.²²⁸ The National FFA has 8,612 chapters and 700,170 members aged 12-21 in all 50 states.²²⁹ In 2020, there were 36 chapters in New Jersey with more than 2,400 members.²³⁰ North Warren Regional High School in Blairstown offers Applied Horticulture/Horticultural Operations²³¹ and has a local FFA Chapter. North Warren Regional High School in Blairstown also offers courses in animal science/wildlife management. Based on student interest, the school could consider offering other related courses such as environmental science or agriculture business management.²³²

4-H is an informal, practical educational program for youth, which assists young people interested in farm animals through livestock projects. The 4-H Youth Development Program is overseen by the Warren County NJAES-RCE.²³³ The 4-H program is led by volunteers that teach about different areas of interest varying from animals, plants, agriculture, and leadership. Within

Warren County, all 4-H club members are active in County events such as the Warren County Farmers Fair.²³⁴

There are two local non-profit groups that focus on agricultural issues, the **Foodshed Alliance** and **Genesis Farm**, located in Blairstown and Frelinghuysen respectively. These organizations are concerned with supporting and promoting sustainable agricultural practices and connecting farming with the community at-large. They also work to foster and train the next generation of farmers in the county.

NJ Farm Link is a program for farmers, new and established, and assists:

- New farmers looking for opportunities to gain experience.
- New farmers looking for land to get started.
- Established farmers looking for land to expand.
- Farm owners looking to lease, sell, or make land available for farming.
- Retiring farmers who would like to ensure their land stays in agricultural production but have no family members who want to continue to farm.
- Farmers looking to hire farm managers, fill apprenticeship positions, or mentor a new farmer.
- Non-profits, municipalities, and counties looking for farmers for farmland they own or manage.
- Farmers and landowners working on farm transfer plans.²³⁵

Farmers interested in land or partnership/job opportunities, as well as those wanting to advertise available land and opportunities, can sign up and create and manage their own listings through the interactive NJ Land Link website. In 2020 there are 14 farmland listings in Warren County.²³⁶

4. Wildlife Management Strategies

Crop damage from wildlife leads to economic loss for the farmer and is a serious problem throughout Warren County. At present, hunting is about the only effective method available to farmers. Although many farmers are avid hunters and do apply for depredation permits that allow them to hunt out of season, even hunting is becoming a less viable solution. Encroaching development that takes away territory from these animals also limits the farmers ability to hunt. As farms become smaller and more developments are built adjacent to farms, areas can no longer be hunted, even by the farmers who own the land, because they would be hunting too close to a neighborhood dwelling. In many instances, this is the only short-term solution to control crop damage. Special hunting options include:

- License exemptions for farm families.
- Special farmer black bear permit.
- Farmer Depredation Permit.
- Deer Management Assistance Program.

Insects are also causing crop damage. The pesticides used to control them can cause other kinds of damage, possible health concerns for the end user of the product, and pollution of the County's water supply. At the county level, studies undertaken by the NJAES-RCE, such as the perimeter trap study on insects and pumpkins undertaken several years ago and the integrated pest management resources available through the NJAES-RCE, are attempts to help solve these problems in ways that work for both the farmer and the environment.²³⁷

Warren County has also been placed on quarantine by the NJDA, due to an outbreak of the spotted lanternfly. This insect has the potential to damage crop output and has been a concern since at least 2018.²³⁸

The NJDA's Division of Plant Industry works to safeguard the state's plant resources from injurious insect and disease pests. The Division implements several programs for detection, inspection, eradication, and control of insect pests, which helps to ensure that the public can enjoy high quality, pest-free agricultural products.²³⁹ The Division's Gypsy Moth Suppression Program is a voluntary cooperative program involving local governments, county and state agencies, as well as the USDA Forest Service. Aerial spray treatments of *Bacillus thuringiensis* are utilized when gypsy moth cycles are at a peak and natural controls are not sufficient to control defoliation. The gypsy moth was reported as a "heavy problem" in White Township in 2009 but disappeared from the aerial defoliation surveys until 2015 when White was identified to have a "severe problem." This dropped in 2016 to a "moderate problem" before disappeared again in 2017 and 2018. White reappeared on the survey as a "moderate problem" in 2019 and was not included in 2020, showing that the invasion has improved through the years, though it is still present in Warren County.²⁴⁰

5. Agricultural Education and Promotion

The USDA has an array of loans and grants, known as the **Rural Development Program**, to assist residents in rural areas of the country to support essential public facilities and services such as water and sewer systems, housing, health clinics, emergency service facilities, and electric and telephone service. The Agricultural Act of 2018 (Farm Bill) updates the Rural Development Program in several ways, including:

- Amends the definition of rural to exclude from population thresholds individuals incarcerated on a long-term or regional basis and excludes the first 1,500 individuals residing in on-base military housing.
- Increases annual appropriated funding for broadband deployment from \$25 million in FY2019 to \$350 million in FY2023.
- The 2018 Farm Bill redirects program funds of existing rural development programs to target a range of rural health issues.
- The 2018 Farm Bill also includes other provisions to reauthorize and/or amend loan and grant programs that help with rural water and wastewater infrastructure, business development and retention, and community and regional development.²⁴¹

Grants and loans are available in three key areas: Business-Cooperative, Housing and Community Facilities (including farm labor housing), and Utilities (including Broadband).²⁴² To

qualify for some of the program's loans and grants, municipalities must have less than 10,000 residents, other program thresholds have increased. At a population of approximately 4,696 as of July 2019,²⁴³ White may qualify for these loans and grants.

The U.S. Taxpayer Relief Act of 1997, administered by the U.S. Department of Treasury's Internal Revenue Service, is meant to smooth out economic disparities that farmers experience from year to year due to the cyclical nature of agriculture. Known as **Farm Income Averaging**, qualified farmers can average all or part of their current year farm income over the previous three years. Substantial tax dollars can be saved by income averaging.²⁴⁴

The New Jersey Legislature has considered bills that would provide income averaging similar to the federal program. In the 2018-2019 Regular Session, Bill NJ A236 was introduced and has since been referred to the Assembly Agriculture and Natural Resource Committee. The NJDA, SADC, Warren County Commissioners, and Warren County CADB can work with, and encourage, the New Jersey Legislature to continue to introduce bills that would assist Warren County and White farmers to remain economically viable.

The New Jersey FSA has both **Direct and Guaranteed Farm Ownership** loans available for farmers, including those in Warren County. Direct Farm Ownership Loans are available up to \$600,000, and guaranteed loans can go up to \$1,776,000. Down Payment loan funds may be used to partially finance the purchase of a family farm. Loan applicants must contribute a minimum down payment of 5% of the purchase price of the farm and the Agency will finance 45% to a maximum loan amount of \$300,015.²⁴⁵ The Hackettstown Service Center handles loans for Warren County.²⁴⁶

FSA loans can be used for most agriculture necessities such as purchasing land, livestock, equipment, feed, seed, supplies, and for construction of buildings, or to make farm improvements.²⁴⁷

Maps

Map 1. Farmland

Map 2. Preserved and Public Lands

Map 3. Agricultural Soil Categories

Map 4. Agricultural Development Area

Map 5. Project Area Map

Target Farm Analysis Maps:

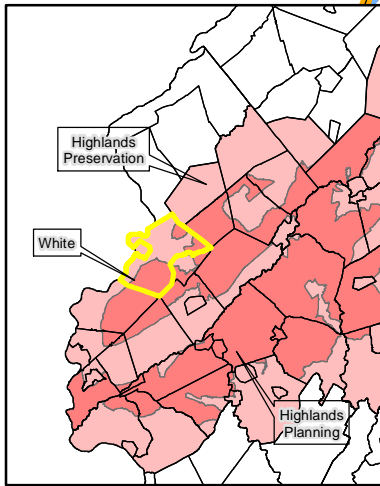
Map A. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Tillable Land

Map B. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Agricultural Soils

Map C. Target Farms: Potentially Eligible Farm Parcels & Units that meet SADC criteria for Agricultural Soils and Tillable Land

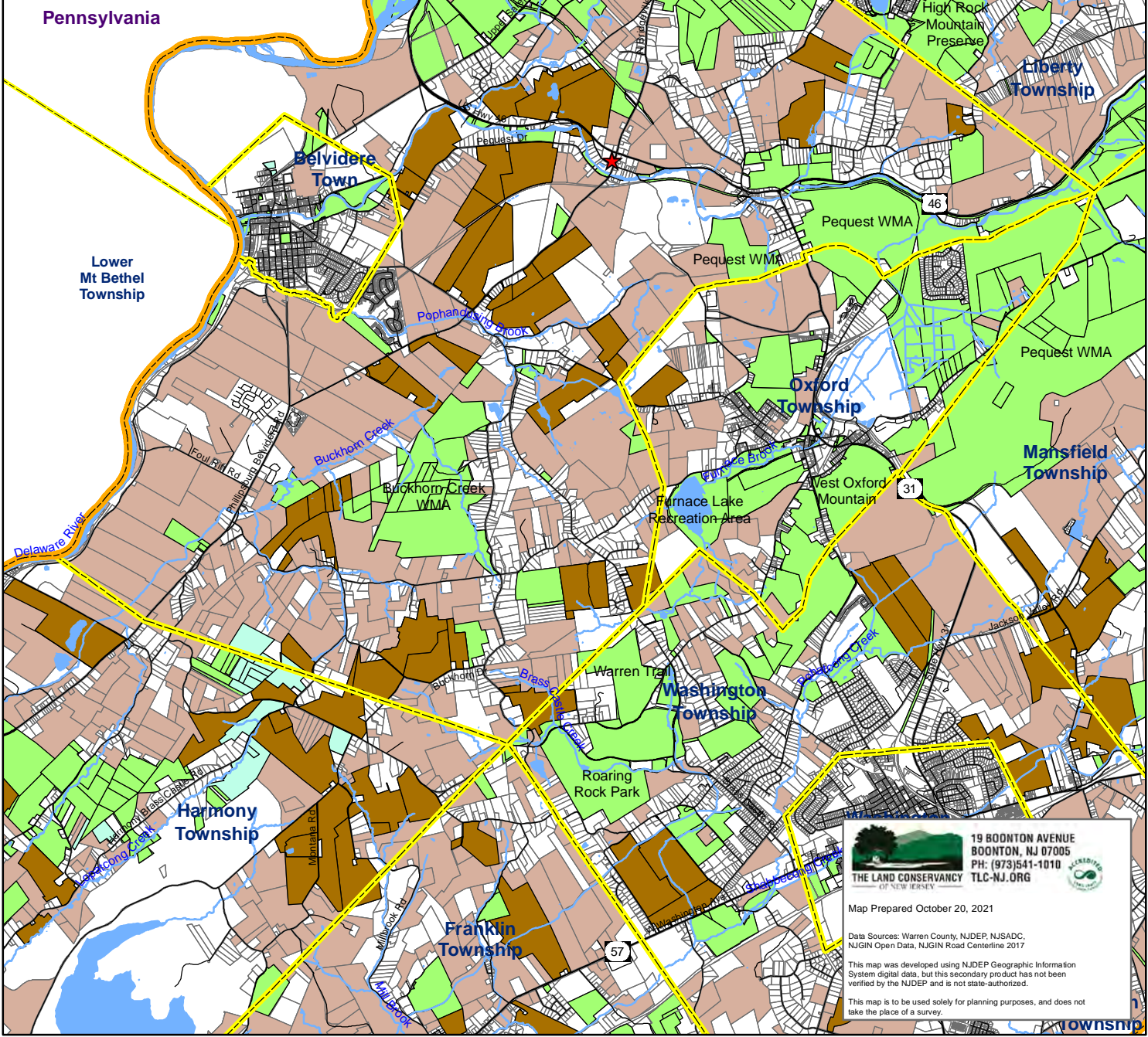
Map 1: Farm Assessed Land

White Township, Warren County



- Municipal Building
- Preserved Farms
- Farm Assessed Properties
- Preserved Open Space
- Non-Profit Properties
- Land Parcels
- Water Body
- Municipal Boundaries
- State Boundaries

0 0.25 0.5 1 1.5 2 Miles



19 BOONTON AVENUE
BOONTON, NJ 07005
PH: (973)541-1010
TLC-NJ.ORG

Map Prepared October 20, 2021

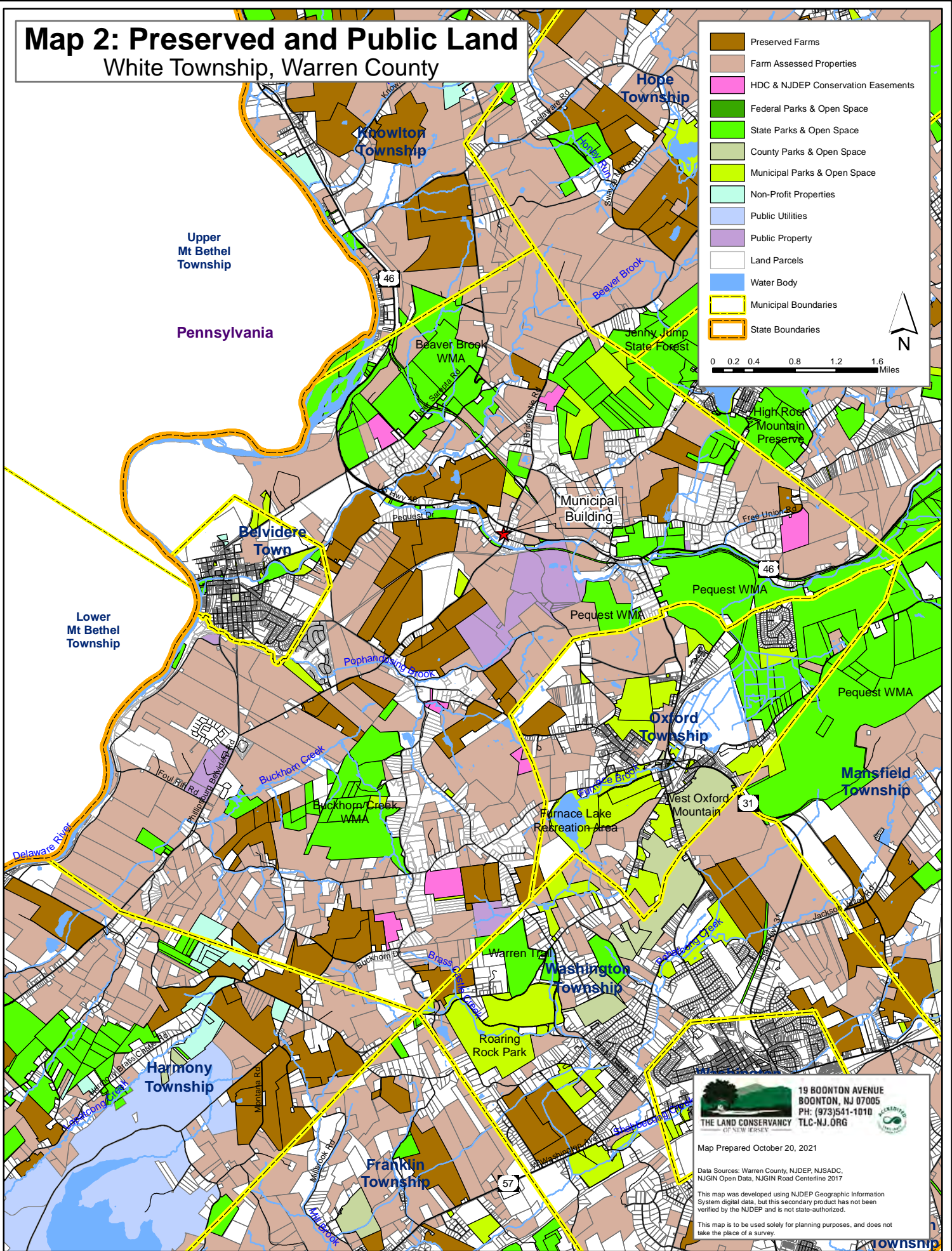
Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centerline 2017


This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.

Map 2: Preserved and Public Land

White Township, Warren County




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Map Prepared October 20, 2021








Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centerline 2017

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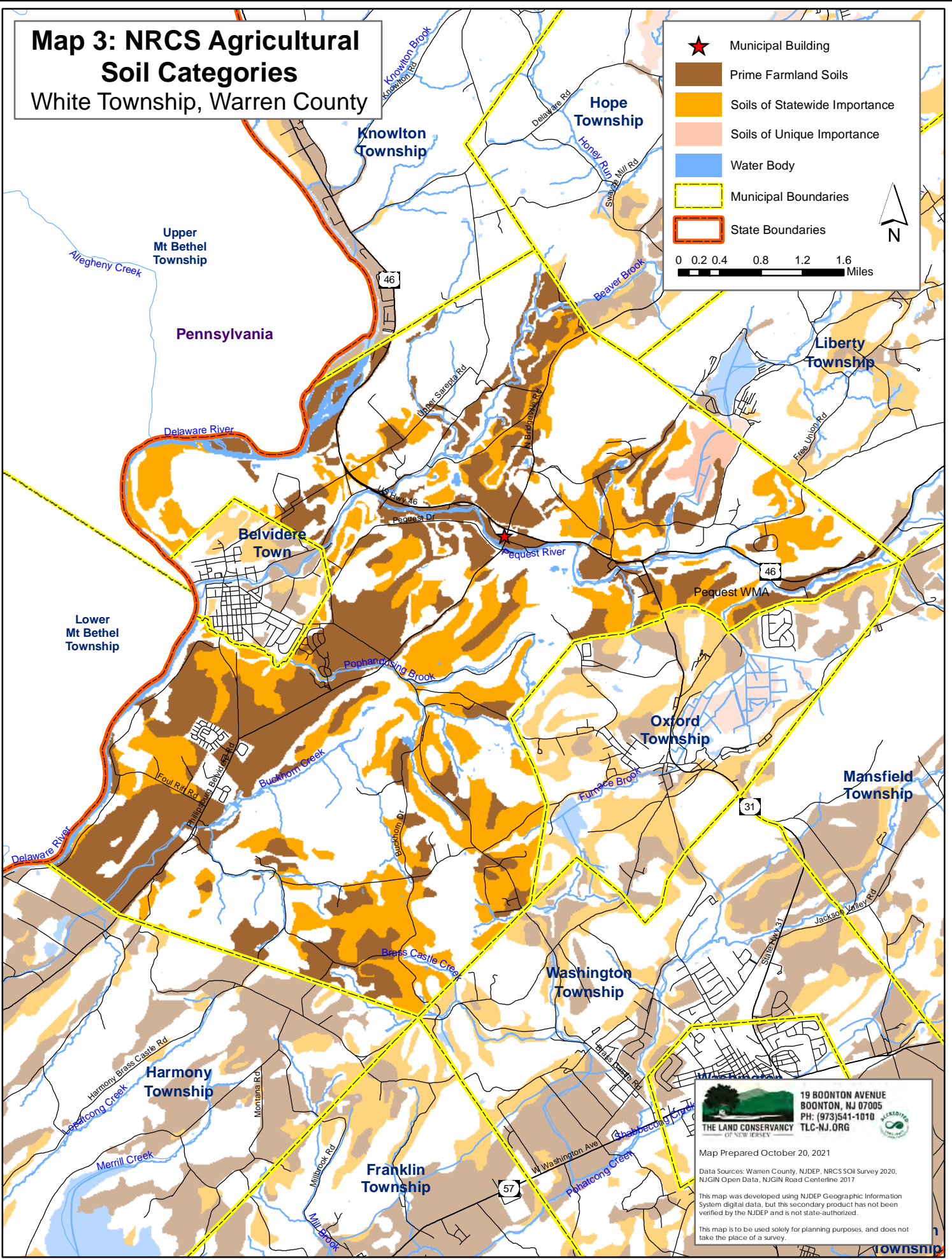

This map is to be used solely for planning purposes, and does not take the place of a survey.

Map 3: NRCS Agricultural Soil Categories

White Township, Warren County

-  Municipal Building
-  Prime Farmland Soils
-  Soils of Statewide Importance
-  Soils of Unique Importance
-  Water Body
-  Municipal Boundaries
-  State Boundaries

0 0.2 0.4 0.8 1.2 1.6 Miles

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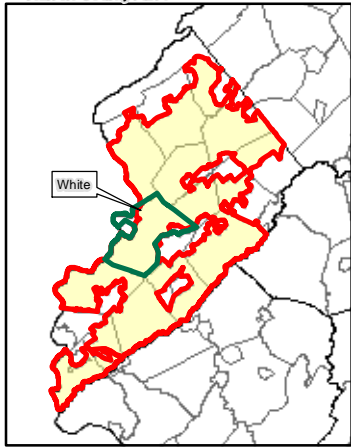
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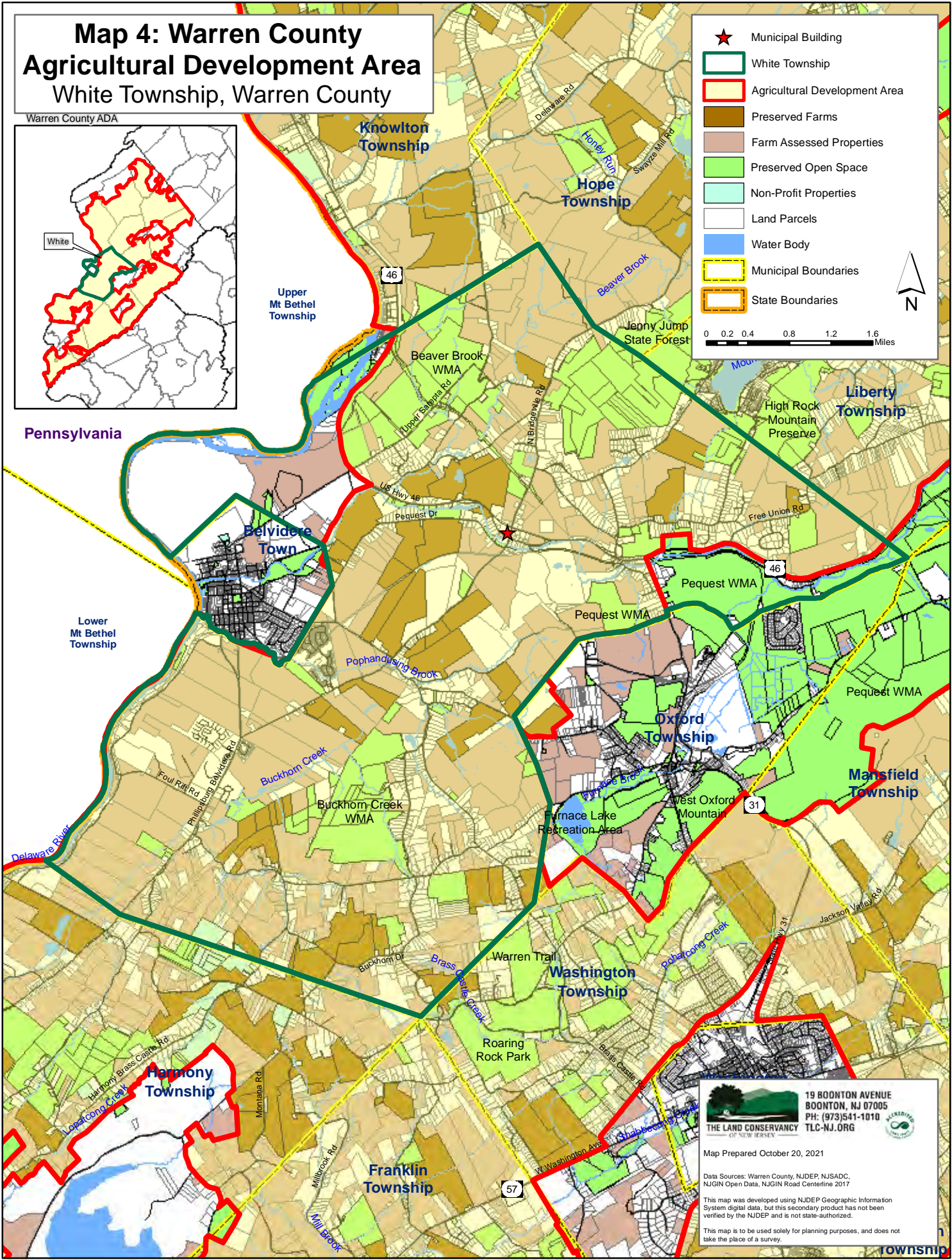
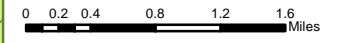
This map is to be used solely for planning purposes, and does not take the place of a survey.


Map 4: Warren County Agricultural Development Area White Township, Warren County

Warren County ADA



- Municipal Building
- White Township
- Agricultural Development Area
- Preserved Farms
- Farm Assessed Properties
- Preserved Open Space
- Non-Profit Properties
- Land Parcels
- Water Body
- Municipal Boundaries
- State Boundaries




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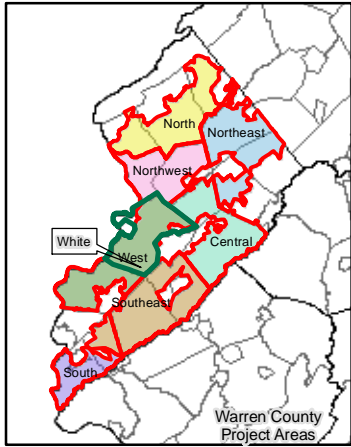
Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centerline 2017

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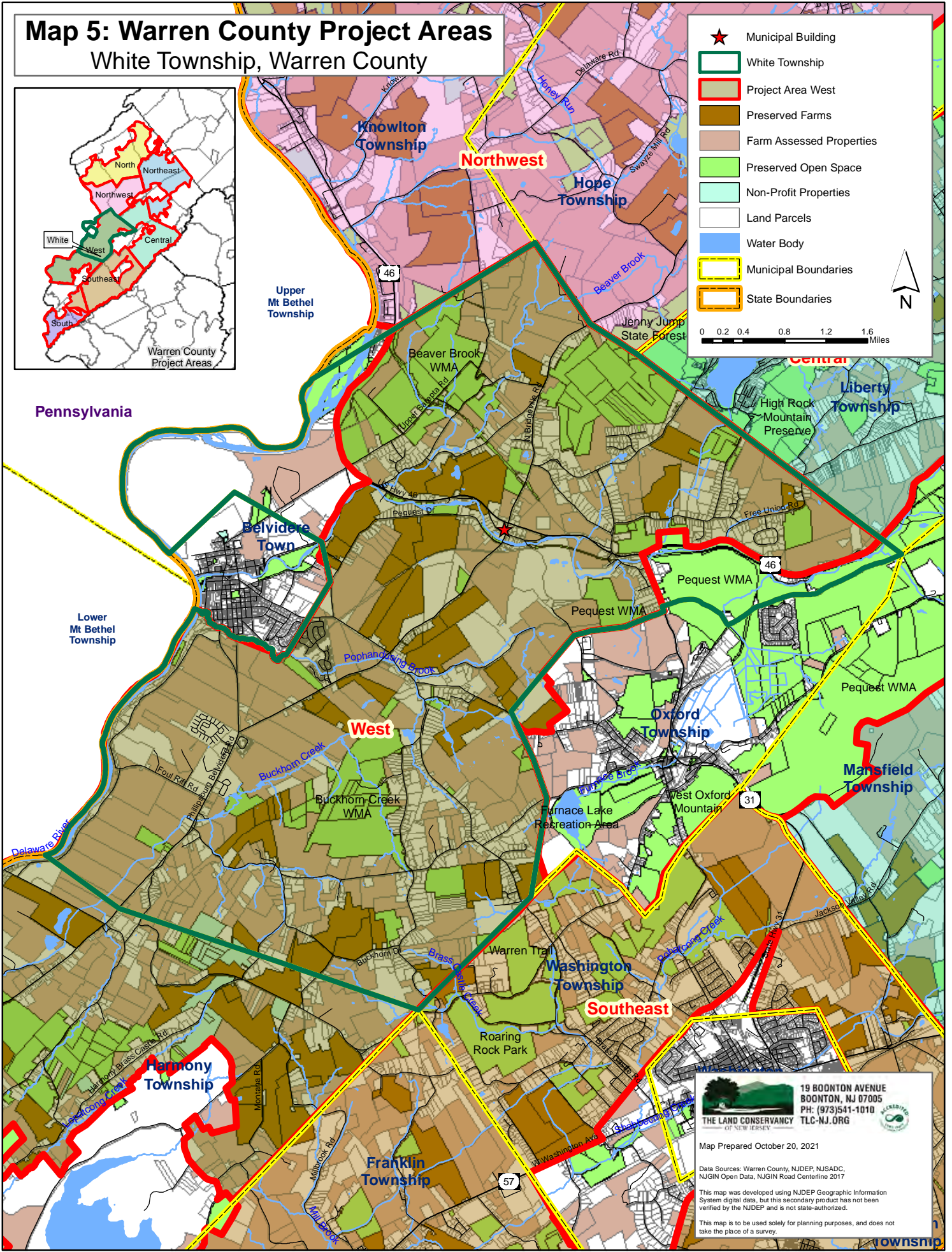
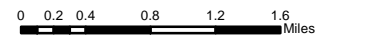
This map is to be used solely for planning purposes, and does not take the place of a survey.

Map 5: Warren County Project Areas

White Township, Warren County



- ★ Municipal Building
- White Township
- Project Area West
- Preserved Farms
- Farm Assessed Properties
- Preserved Open Space
- Non-Profit Properties
- Land Parcels
- Water Body
- Municipal Boundaries
- State Boundaries



19 BOONTON AVENUE
BOONTON, NJ 07005
PH: (973)541-1010
TLC-NJ.ORG

Map Prepared October 20, 2021

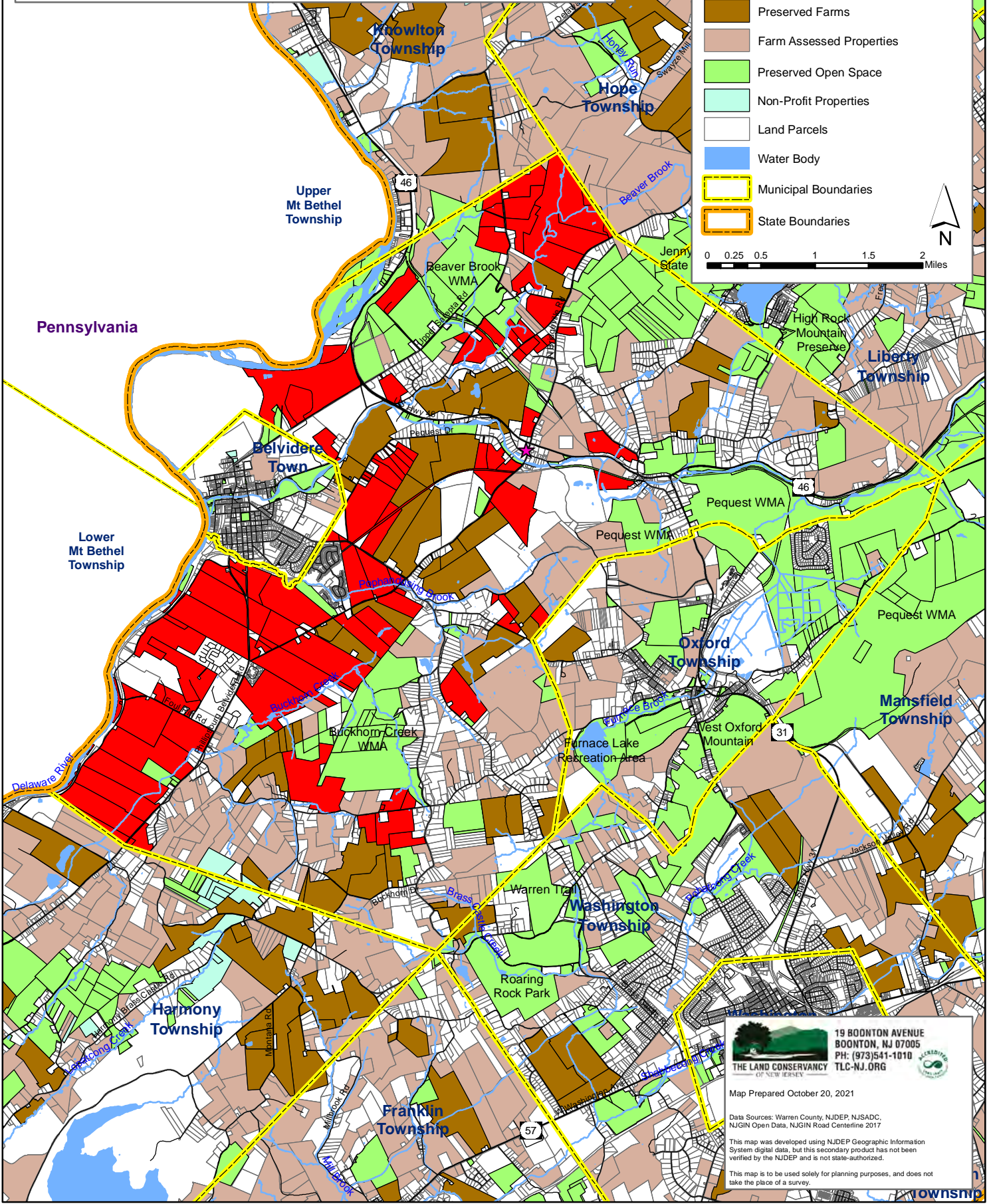
Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centerline 2017

This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.

Map A: Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Tillable Land

White Township, Warren County



19 BOONTON AVENUE
BOONTON, NJ 07005
PH: (973)541-1010
TLC-NJ.ORG

Map Prepared October 20, 2021

Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centerline 2017











This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.


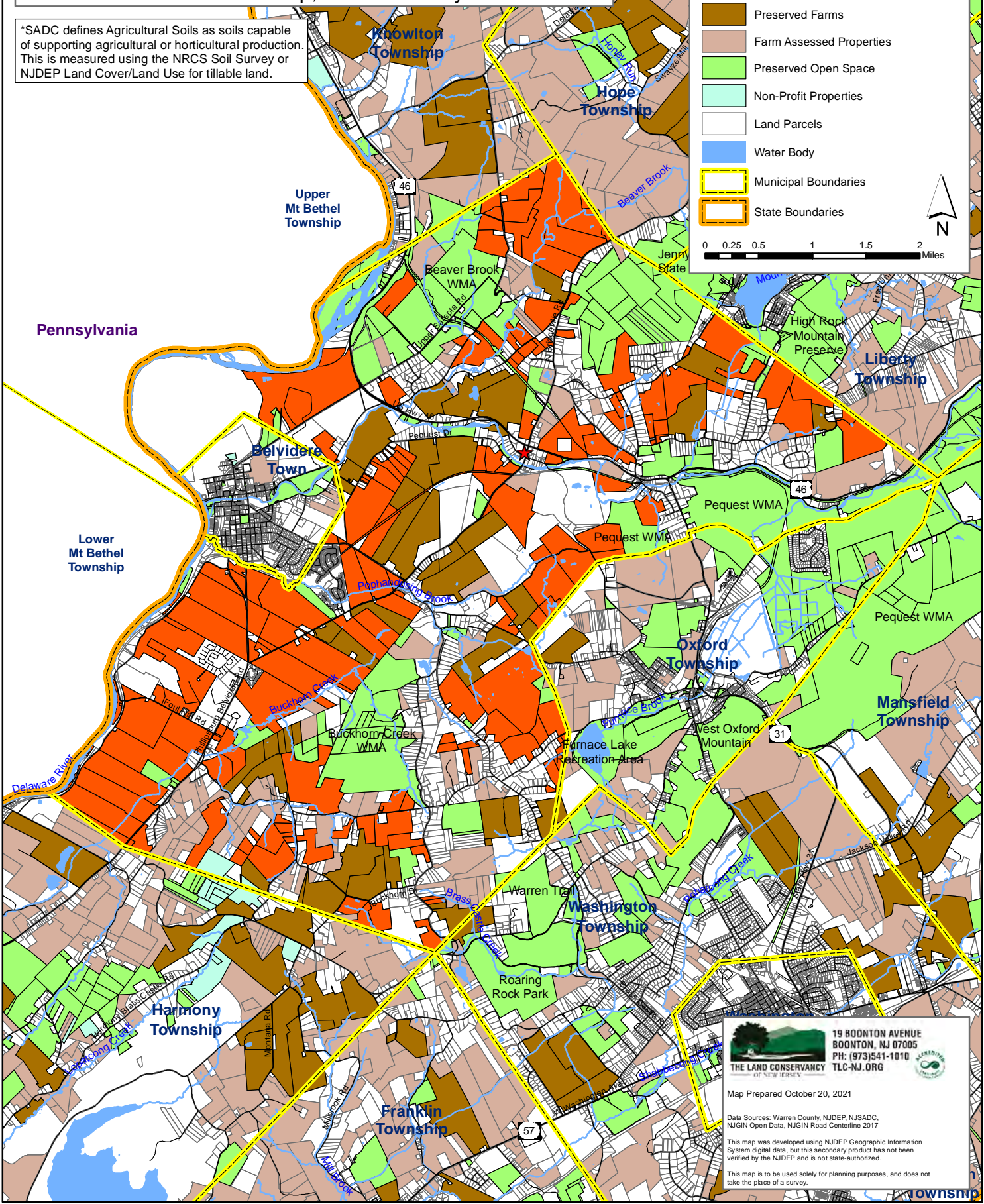

Map B: Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Agricultural Soils*

White Township, Warren County

*SADC defines Agricultural Soils as soils capable of supporting agricultural or horticultural production. This is measured using the NRCS Soil Survey or NJDEP Land Cover/Land Use for tillable land.

-  Municipal Building
-  Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Soils*
-  Preserved Farms
-  Farm Assessed Properties
-  Preserved Open Space
-  Non-Profit Properties
-  Land Parcels
-  Water Body
-  Municipal Boundaries
-  State Boundaries

0 0.25 0.5 1 1.5 2 Miles

19 BOONTON AVENUE
BOONTON, NJ 07005
PH: (973)541-1010
TLC-NJ.ORG

Map Prepared October 20, 2021

Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centeline 2017

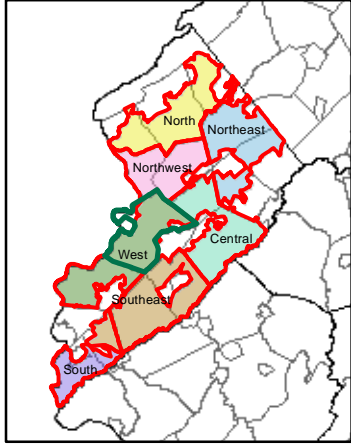
This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.

Map C: Target Farms

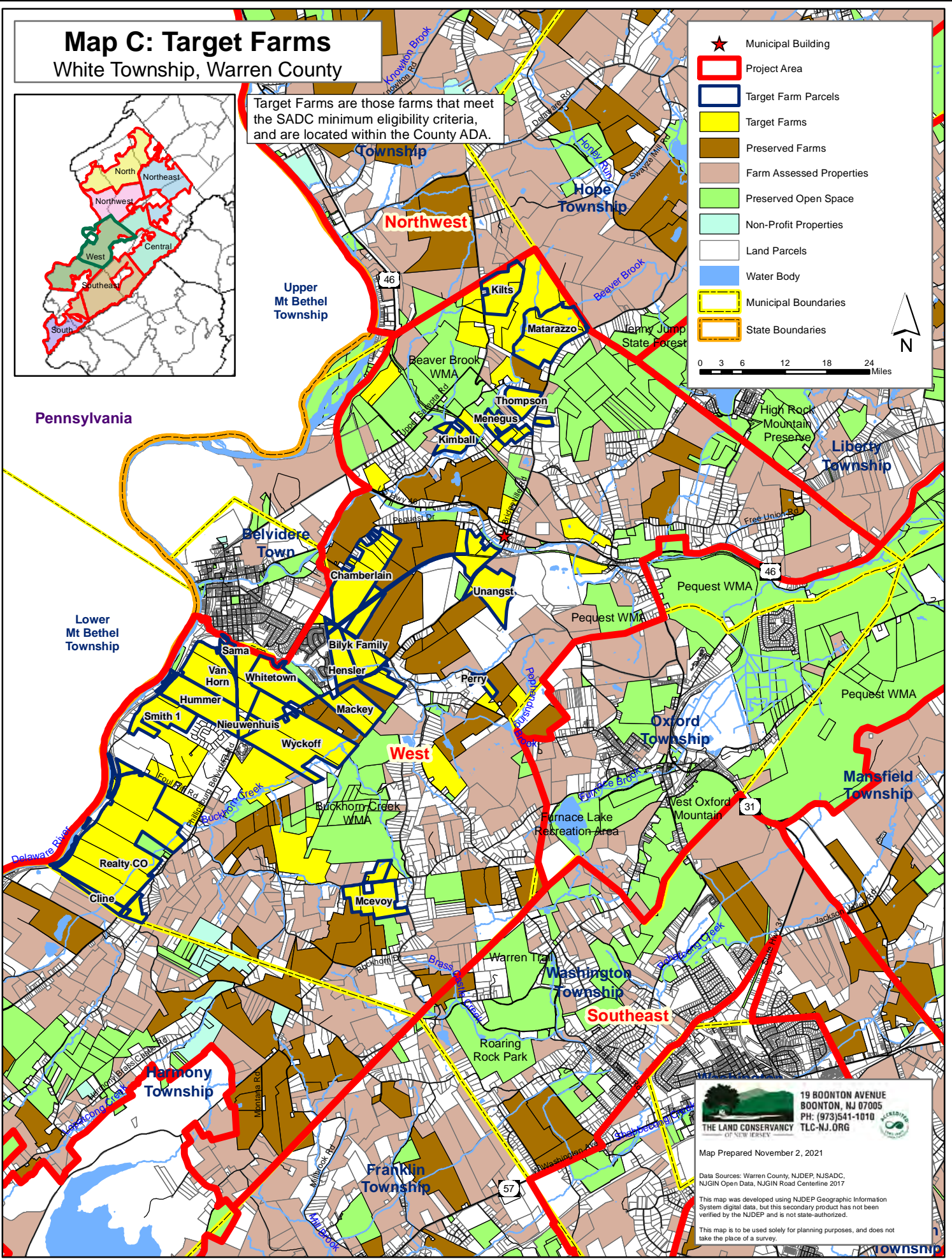
White Township, Warren County

Target Farms are those farms that meet the SADC minimum eligibility criteria, and are located within the County ADA.



- ★ Municipal Building
- Project Area
- Target Farm Parcels
- Target Farms
- Preserved Farms
- Farm Assessed Properties
- Preserved Open Space
- Non-Profit Properties
- Land Parcels
- Water Body
- Municipal Boundaries
- State Boundaries

0 3 6 12 18 24 Miles



**19 BOONTON AVENUE
BOONTON, NJ 07005
PH: (973)541-1010
TLC-NJ.ORG**

**THE LAND CONSERVANCY
OF NEW JERSEY**

Map Prepared November 2, 2021

Data Sources: Warren County, NJDEP, NJSADC, NJGIN Open Data, NJGIN Road Centerline 2017

This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.

Appendix

Appendix A. Public Meeting Materials

Appendix B. Agricultural Support Services

Appendix C. White Right to Farm Ordinance (1997)

Comprehensive Farmland Preservation Plan 2020 Update

- draft -

Township of White

Public Meeting:
Township Committee
September 9, 2020



Bever Brook USFWS Preserve


1

SADC Guidelines For Developing and Updating Municipal Comprehensive Farmland Preservation Plans

SADC Rules Adopted May 24, 2007
Amended July 25, 2019:

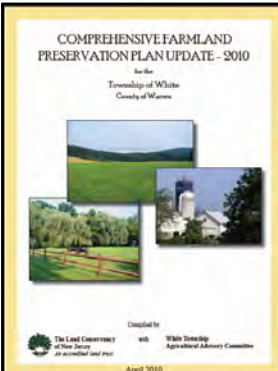
- Provides uniform standards for municipal farmland preservation plans
- Requires the latest data: agricultural statistics, economic development, land use and resource conservation

SADC providing 50% grant to White Township to complete Plan Update



Chamberlain Brotherton Farm

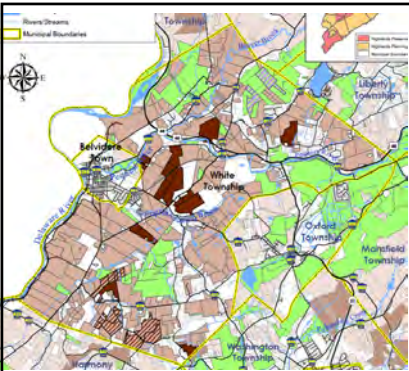
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2010 Comprehensive Farmland Plan

- White Township is a hub for agriculture in Warren County
- Supports many types of agriculture primarily corn, hay, and soybeans
- As of 2010, the Township had preserved **818** acres of farmland
- 2010 Goals to preserve an additional:
 - 150 acres in year 1
 - 750 acres by year 5
 - 1,400 acres in year 10

3

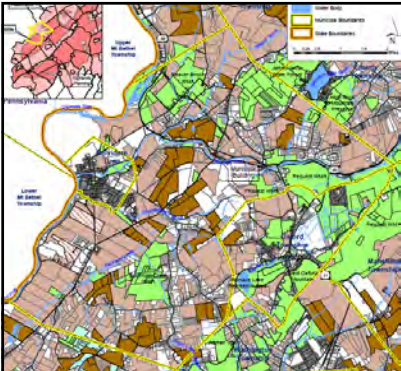


Farmland Map 2010 Plan

9,378 acres of farm assessed properties in White Township. **818** acres of preserved farmland.

Of this, **5,420** acres (58%) are identified as active agricultural land using the NIDEP Land Use/Land Cover.

4



Farmland Map 2020 Plan Update

- Preserved Farms
- Farm Assessed Properties
- Farm Properties (Assessed Assessment)
- Preserved Open Space
- Non Profit Properties
- Land Parcels
- Water Body
- Municipal Boundaries
- County Boundaries

Total Preserved Farmland: **1,801** acres

An additional **982** acres have been preserved since the 2010 plan

White ranks **7th** in preserved farmland acreage within Warren County

5

I. Agricultural Land Base

- Inventory and map farm properties
- Document and map agricultural soils
- Number of irrigated acres and available water sources.
- Assessment by average farm size and agricultural use (cropland, pasture, equine)



Hensler Rusticas Farm

6

II. Agricultural Industry

- Historical crop trends
- Market value of agricultural products over the last 20 years
- Support services within the market region
- Regional agricultural trends



Riverview Ranch

7

III. Land Use Planning

- Master Plan and municipal development regulations
- Transfer of Development Rights (TDR), mandatory clustering, non-contiguous clustering and lot size averaging
- Buffer requirements between agriculture and other land uses



Postma Farm

8

IV. Farmland Preservation Program

- Farmland preservation program and expenditures
- County Agricultural Development Areas (ADA)
- Planning Incentive Grant Project Areas (PIGs)
- Coordination with open preservation
- Easement monitoring and enforcement



Fuchs Farm

9

V. Future Farmland Preservation Program

- Goals for farmland preservation
- Minimum eligibility and ranking criteria to prioritize preservation
- Municipal policies
- Limiting factors, as well as potential strategies – funding, costs, landowner interest



Rauburg Station Rd

10

VI. Agricultural Economic Development

- Agricultural industry retention, expansion and recruitment strategies
- Business and institutional support providers, to address marketing, education, and community supported agriculture opportunities
- Anticipated agricultural trends

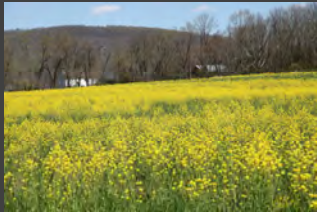


Mackey's Orchard

11

VII. Natural Resource Conservation

- Soil and water conservation programs
- Water conservation and allocation strategies
- Energy conservation and waste management




Upper Sarepta Rd

12

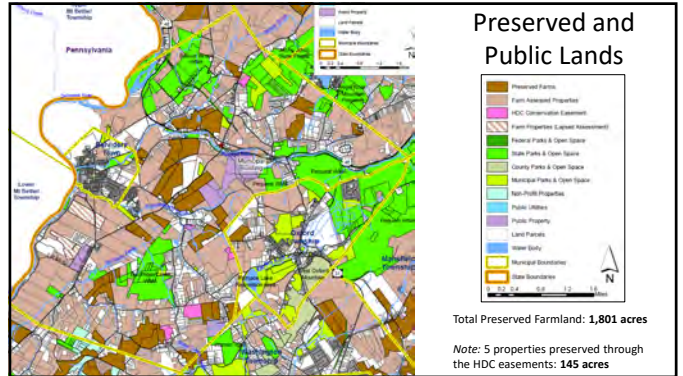
VIII. Sustainability, Retention and Promotion

- Right-to-Farm and agricultural mediation
- Right-to-Farm ordinance
- Efforts on:
 - Permit Streamlining
 - Agricultural Vehicle Movement
 - Labor Housing
 - Education and Promotion

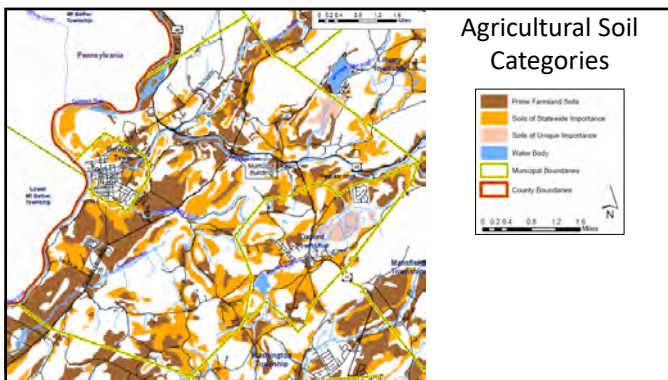


Hammer Farm

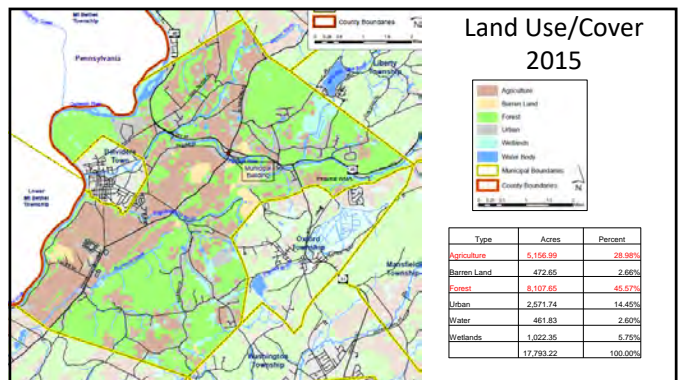
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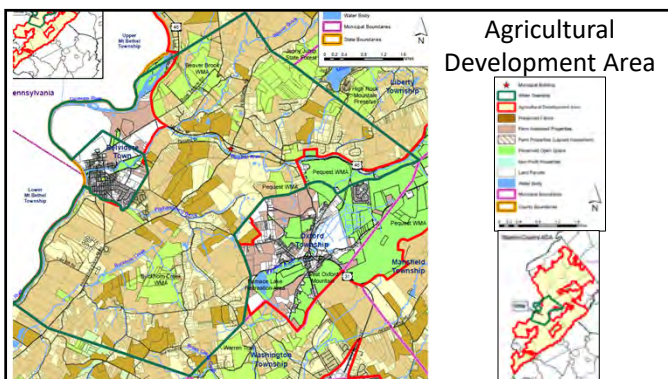
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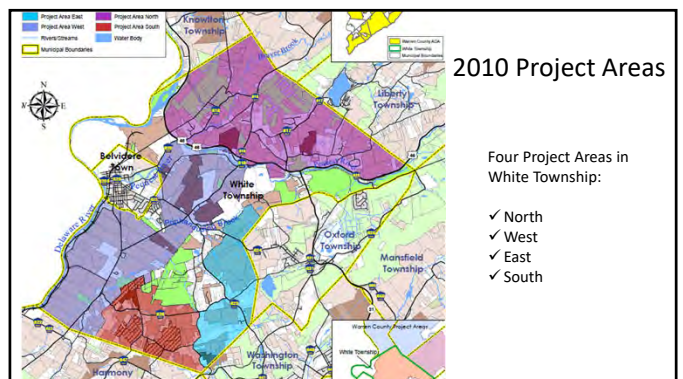
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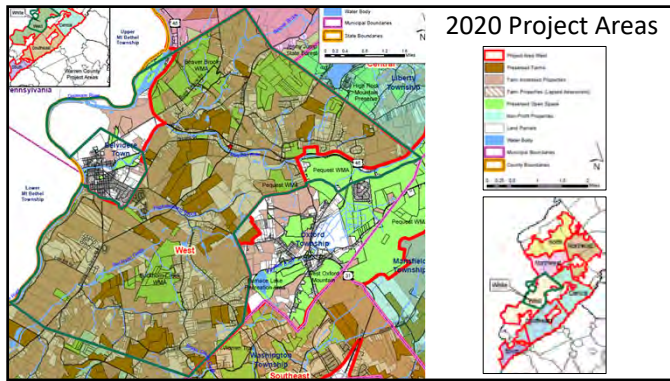
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17




18



19

Thank You



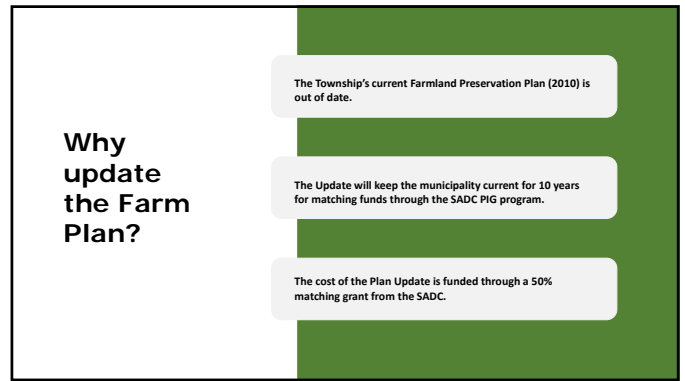
Barbara Heskins Davis, PP, AICP
The Land Conservancy of New Jersey
Email: bhdavis@tlc-nj.org

The slide features a "Thank You" message. On the right side, there is a logo for "THE LAND CONSERVANCY OF NEW JERSEY" which depicts a landscape with a tree, a field, and mountains. Below the logo, the contact information for Barbara Heskins Davis is provided, including her title (PP, AICP), the organization's name, and her email address.

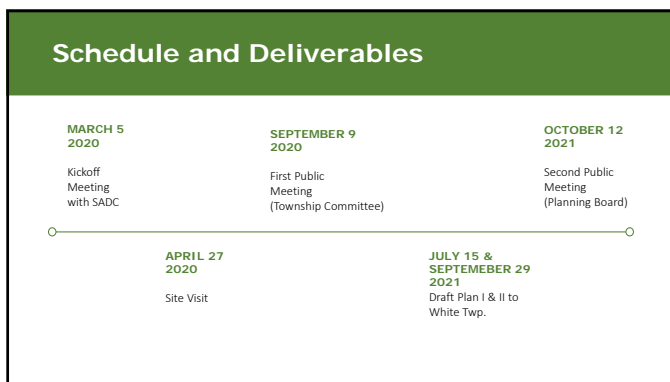
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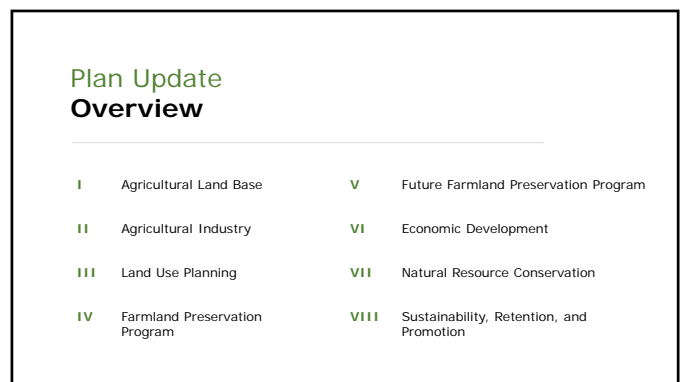
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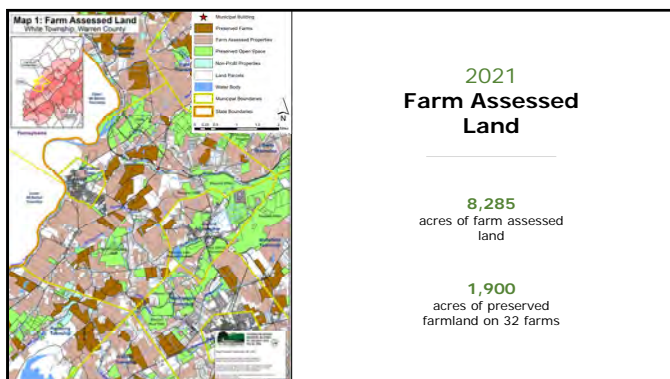
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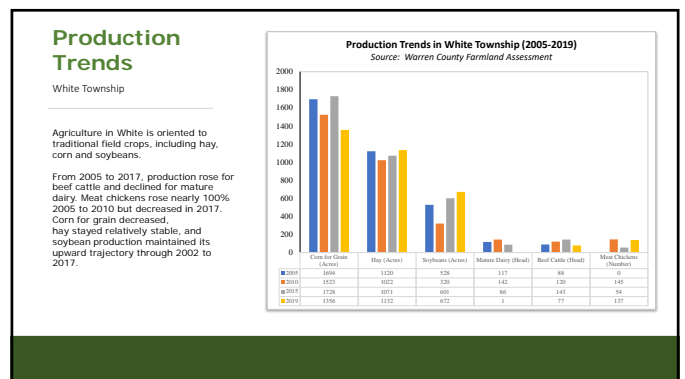
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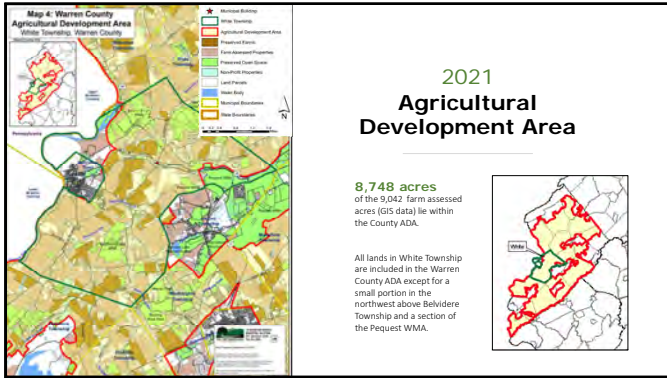
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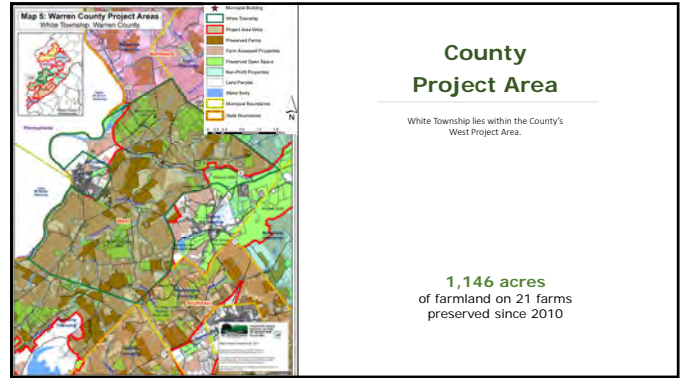
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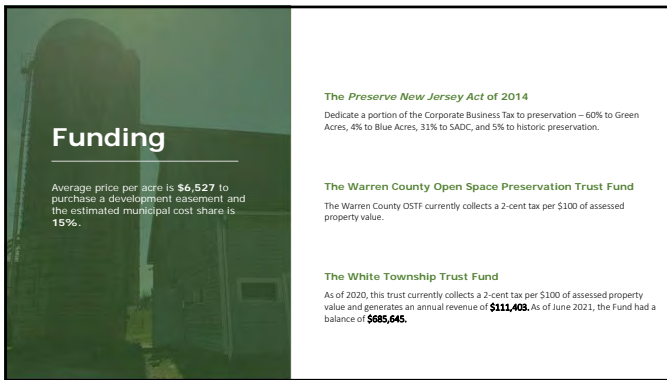
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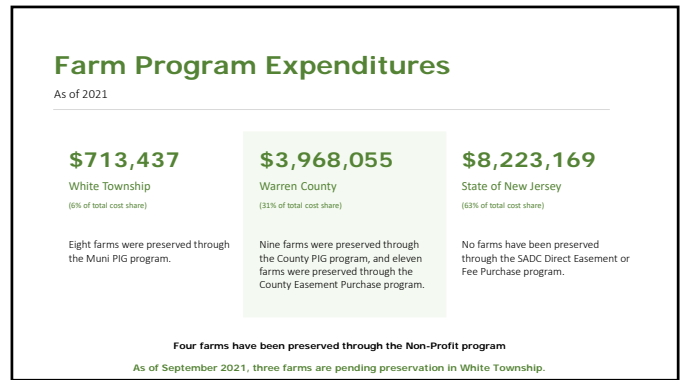
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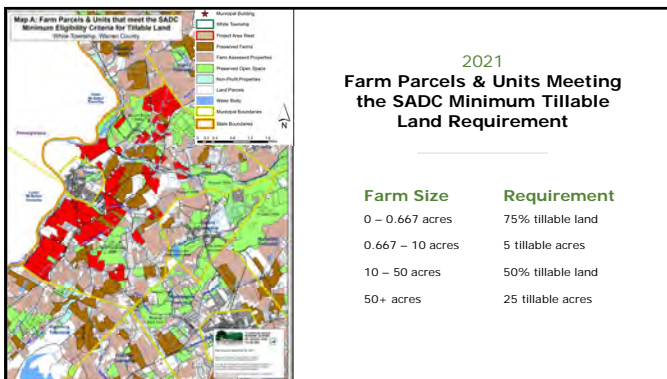
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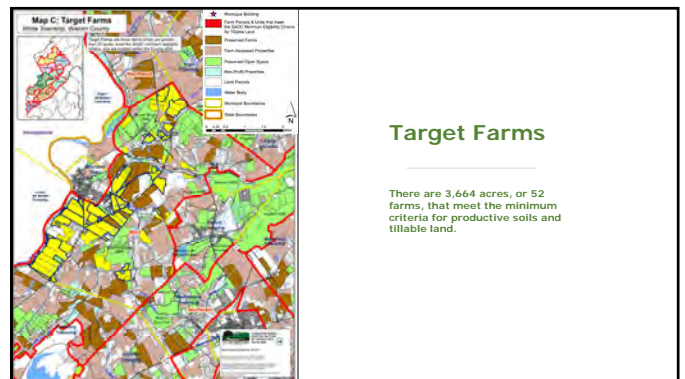
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10



11



12



13



Thank You

Barbara Heskins Davis, PP, AICP
The Land Conservancy of New Jersey
bhdavis@tlc-nj.org

14

Agricultural Businesses Servicing Warren County and White Township

Sources: SADC Green Pages

Equipment

Central Jersey Equipment
228 State Rt 94
Columbia, NJ 07832
Warren County
(908) 362-6916

Everitt Equipment LLC
258 County Rd 579
Ringoes, NJ 08551
Hunterdon County
(908) 782-5082
<http://www.everittequipment.com/>

Powerco, Inc
12 NJ-173
Clinton, NJ 08809
Hunterdon County
(908) 735-2149
<https://www.powercoinc.com/>

Smith Tractor & Equipment, Inc
115 NJ-31
Washington, NJ 07882
Warren County
(908) 689-7900
<https://www.smithtractorandequipment.com/>

Seed

Growmark FS
60 Lehigh Ave
Bloomsbury, NJ 08804
Hunterdon County
(908) 479-4500

Nutrien Ag Solutions
127 Perryville Rd
Pittstown, NJ 08867
Hunterdon County
(908) 735-5545

Garden State Heirloom Seed Society
82 Delaware Rd
Columbia, NJ 07832
Warren County
(973) 475-2730

Animal Feed
Blairstown Ace
2 Bridge St
Blairstown, NJ 07825
Warren County
(908) 362-6177

Morristown Agway Store
176 Ridgedale Ave
Morristown, NJ 07960
Morris County
(973) 538-3232
<https://morristownagway.com/>

Sergeantsville Country Store
735 Route 523
Sergeantsville, NJ 08557 Hunterdon County
(609) 397-0807
<https://sergeantsvillegrainandfeed.com/>

Tractor Supply Company
128 NJ-94 #9
Blairstown, NJ 07825
Warren County
(908) 362-0082
<https://www.tractorsupply.com/>

Tractor Supply Company
293 US Hwy 206, Unit 15A
Flanders, NJ 07836
Morris County
(973) 252-2925

Tractor Supply Company
144 Hwy 202/31 North
Ringoes, NJ 08551
Hunterdon County
(908) 284-2021

Tractor Supply Company
775 NJ-23
Sussex, NJ 07461
Sussex County
(973) 875-7087

Tractor Supply Company
398 Rte 57 West 4
Washington, NJ 07882
Warren County
(908) 689-3202

Dover Pet Shop
112 E Blackwell St
Dover, NJ 07801
Morris County
(973) 361-2322

Ise Feed
110 Good Springs Rd
Stewartsville, NJ 08886
Warren County
(908) 859-8424

Mike's Feed Farm
90 Hamburg Turnpike
Riverdale, NJ 07457
Morris County
(973) 839-7747
<https://www.mikesfeedfarm.com/>

New Village Farms
11 Stewartsville Rd
Stewartsville, NJ 08886
Warren County
(908) 859-3381

Outlaw Outfitters
530 US-206
Newton, NJ 07860
(844) 780-3261
Sussex County
<https://outlawtack.com/>

Penwell Mills
448 Penwell Rd
Port Murray, NJ 07865
Warren County
(908) 689-3725

The Tack Room
367 Pittstown Rd
Pittstown, NJ 08867
Hunterdon County
(908) 730-8388

Schaefer Farms
1051 County Rd 523
Flemington, NJ 08822
Hunterdon County
<http://www.schaeferfarms.com/>

Delaware Valley Feed and Farm Supply
1133A NJ-12
Frenchtown, NJ 08825
Hunterdon County
(908) 628-3550

Deer Run Hay Company
110 Amwell Rd
Flemington, NJ 08822
Hunterdon County
(732) 904-5137

Brodhecker Farm, LLC
2 Branchville-Lawson
Newton, NJ 07860
Sussex County
(973) 383-3592
<https://brodheckerfarm.com/>

Slaughterhouses
A&M Packing LLC
268 Newton-Swartwood Rd
Newton, NJ 07860
Sussex County
(873) 383-4291

Seugling Meat Packing Inc.
9 Mandeville Ave
Pequannock, NJ 07440
Morris County
(973) 694-3156

V Roche Butcher Shop
9 High St
Whitehouse Station, NJ 08889
Hunterdon County
(908) 534-2006

Green Village Packing Co.
68 Britten Rd
Green Village, NJ 07935
Morris County
(973) 377-0875
<https://greenvillagepacking.com/>

Louie Chiu Slaughterhouse
40 Montana Rd
New Village, NJ 08886
Warren County
(908) 859-6635

Livestock Supplies

Ackerman & Sons Livestock Hauling LLC
932 Maple Ave
Stillwater, NJ 07875
Sussex County
(973) 383-4240

Construction & Concrete

Morton Buildings
512 State Rt 57
Phillipsburg, NJ 08865
Warren County
(908) 454-7900
<https://mortonbuildings.com/phillipsburg-nj>

Fine Woodworking
606 Rt 519
Sussex, NJ 07461
Sussex County
(973) 875-8779

County Concrete Corp.
50 Railroad Ave
Kenvil, NJ 07847
Sussex County
(973) 584-7122
<https://www.countyconcretenj.com/>

Lentini Ready Mix, Inc.
217 Limecrest Rd
Newton, NJ 07860
Sussex County
(973) 300-4146

SCC Concrete, Inc.
1051 River Rd
Phillipsburg, NJ 08865
Warren County
(908) 859-2172
<https://www.sccconcreteinc.com/>

Sparta Redi-Mix
33 Demarest Rd
Sparta, NJ 07871
Sussex County
(888) 383-4651
<https://www.spartaredimix.com/>

Flemington Precast & Supply, LLC
18 Allen St
Flemington, NJ 08822
Hunterdon County
(908) 782-3246
<https://www.flemingtonprecast.com>

Franklin Precast
95 Scott Rd
Franklin, NJ 07416
Warren County (973) 827-7563
<https://www.franklinprecast.com/>

Precast Manufacturing Co.
187 Stryker's Rd
Phillipsburg, NJ 08865
Warren County
(908) 454-2122
<https://www.precastmfgco.com/>

B&B Concrete Co.
811 Rt 57
Stewartsville, NJ 08886
Warren County
(908) 454-1622
<http://www.bakermason.com/>

Donald Baker Mason Contractors, Inc.
188 Thatcher Hill Rd
Flemington, NJ 08822
Warren County
(908) 782-2115
<http://www.bakermason.com/>

JM Lenze Construction
69 Upper North Shore Rd
Branchville, NJ 07826
Sussex County
(937) 948-5491

SMB Construction
73 Mercer St
Phillipsburg, NJ 08865
Warren County
(908) 454-9530

William R. Hunt Stonework & Masonry, LLC
PO Box 346
Whitehouse Station, NJ
Hunterdon County
(908) 534-2194

Bill Wrobleski, LLC
5 Whitehall Rd
Andover, NJ 07821
Sussex County
(973) 347-3888

Brad Lauyer Masonry Contractor, LLC
611 Main St
Pattensburg, NJ 08802
Hunterdon County
(908) 735-0875

A.A. Matulay
PO Box, 539 70 Rt 202
Ringoes, NJ 08551
Hunterdon County
(908) 782-7666

Well Drilling

Samuel Stothoff Co., Inc.
PO Box, 59 Rt 31
Flemington, NJ 08822
Hunterdon County
(908) 782-2116
<https://www.stothoffwellwater.com/>

Colaluce Well & Pump Service
2293 Rt 57
Washington, NJ 07882
Warren County
(908) 454-8008
<https://www.colalucewell.com/>

Dan Ballentine Well Drilling, Inc.
PO Box 178, Port Murray Rd
Port Murray, NJ 07865
Warren County
(908) 689-7666
<https://www.ballentinedrilling.com/>

Site Work Contractors

Apgar Brothers Excavating Co.
PO Box 91
Whitehouse Station, NJ 08889
Hunterdon County
(903) 303-9758

Harrington Contractors
50 Parker Pd
Chester, NJ 07930
Morris County
(908) 879-7500
<http://www.harringtoncontractors.com>

KOR Companies
1 Greenwood Place
Flemington, NJ 08822
Hunterdon County
(908) 284-2272

Charles T. Matarazzo Excavating & Masonry, LLC
1024 Route 173
Asbury, NJ 08802
Warren County
(908) 479-2025

John P. Martin Excavating, LLC
112 Ferry Rd
Flemington, NJ 08822
(908) 782-2512
Hunterdon County
<https://www.jpmartinexcavating.com>

A.S. Milkowski & Sons Contracting
249 Rocky Run Rd
Glen Gardner, NJ 08826
Hunterdon County
(908) 537-2590

Rick Mueller Excavating, Inc.
31 Rick Rd Milford, NJ 08848
Hunterdon County
(908) 996-3031

S Snook Excavating, Inc.
150 Pelletown Rd
Lafayette, NJ 07848
Sussex County
(973) 875-5754

Wantage Excavating Co.
137 Holland Rd
Sussex, NJ 07461
Sussex County
(973) 875-5670
<https://www.wantageexcavating.com/>

Willever Excavating
200 Creek Rd
Phillipsburg, NJ 08865
Warren County
(908) 454-6242

Bill Wrobleski, LLC
5 Whitehall Rd
Andover, NJ 07821
Sussex County
(973) 347-3888

Petersen Excavating
273 Mt. Lake Rd
Belvidere, NJ 07823
Warren County
(908) 637-8531

Earthway Excavating
16 Greengate Rd
Lebanon, NJ 08833
Hunterdon County
(908) 534-4343

William R. Hunt Stonework & Masonry
PO Box 346
Whitehouse Station, NJ 08889
Hunterdon County
(908) 534-2194

The Viersma Companies
PO Box 224, Airport Rd
Allamuch, NJ 07820
Warren County
(908) 852-0552
<https://www.viersma.com>

Richard Pfauth, Jr. & Son
239 Halls Mill Rd
Lebanon, NJ 08833
Hunterdon County
(908) 534-2535

John Peach Excavating
PO Box 78, Pleasant Grove Rd
Schooleys Mountain, NJ 07870
Morris County
(908) 852-5875

William H. Wilson Contracting Co., Inc.
210 Houses Corner Rd
Sparta, NJ 07871
Sussex County
(973) 579-5353

D&V Construction Co.
83 Good Springs Rd
Asbury, NJ 08802
Warren County
(908) 479-6911

A. Mokros Backhoe Service, Inc.
17 Lynnbrook Dr
Lambertville, NJ 08530
Hunterdon County
(609) 737-8311

Razz Construction
79 Sky Manor Rd
Pittstown, NJ 08867
Hunterdon County
(908) 996-3298

Ravcon Construction Group LLC
PO Box 1098
Whitehouse, NJ 08889
Hunterdon County
(908) 482-7037
<https://www.ravcon.us/>

Paul W. Steinbeiser Landscape
718 County Rd 519
Frenchtown, NJ 08825
Hunterdon County
(908) 996-6609
<https://www.pwsteinbeiser.com/>

Fence Installation

Farmette Services
67 Henry Rd
Newton, NJ 07860
Sussex County
(973) 300-0103

Hunt's Fencing
567 Rt 94
Newton, Nj 07860
Sussex County
(973) 383-4426

The Fence Company
3 Hill Hollow Rd
Pittstown, NJ 08867
Hunterdon County
(908) 735-8879

J&M Fence & Sheds
328 Rt 46 West
Great Meadows, NJ 07838
Warren County
(908) 637-8799

Seamless Gutters

Warren Valley Seamless Gutters
17 Ernella Dr
Belvidere, NJ 07823
Warren County
(908) 752-5397

Wayne Johnson & Sons, Inc.
1167 NJ-23
Kinnelon, NJ 07405
Morris County
(201) 838-2358
<https://www.waynejohnsonandsons.net>

NJ Soil Conservation Districts

Upper Delaware Soil Conservation District
51 Main Street, Suite B
Blairstown, NJ 07825
Warren County
(908) 852-2579
<https://upperdelawarescd-nj.com>

NJ County Agricultural Development Boards

Warren County Agricultural Development Board
500 Mt. Pisgah Ave, PO Box 179
Oxford, NJ 07863
(908) 453-3252
<https://www.co.warren.nj.us/Land%20Preservation%20Dept/CADB.html>

Rutgers

Cooperative Extension of Warren County
165 County Rd 519 South, Suite 102
Belvidere, NJ 07823
(908) 475-6505
<https://warren.njaes.rutgers.edu/>

United States Department of Agriculture (USDA) – Farm Service Agency (FSA)

Hackettstown Service Center
101 Bilby Rd, Suite 1H
Hackettstown, NJ 07840
(908) 852-2576
<https://www.fsa.usda.gov/state-offices/New-Jersey/index>

USDA – Natural Resources Conservation Service (NRCS)

Hackettstown Service Center
101 Bilby Rd, Suite 1H
Hackettstown, NJ 07840
(908) 852-2576
<https://www.nrcs.usda.gov/wps/portal/nrcs/site/nj/home/>

USDA Rural Development

Hackettstown Service Center
101 Bilby Rd, Suite 1H
Hackettstown, NJ 07840
(908) 852-2576
<https://www.rd.usda.gov/nj>

Auctions

Hackettstown Livestock Auction
225 W Stiger St
Hackettstown, NJ 07840
Warren County
(908) 852-0444
<https://www.hackettstownauction.com>

Crop Insurance Agents

Crop Growers, LLC
9 County Rd 618
Lebanon, NJ 08833
Hunterdon County
(800) 234-7012
<https://www.cropgrowers.com/>

Financial Services

Farm Credit East
9 County Road 618
Lebanon, NJ 08833
(908) 782-5215
<https://www.farmcrediteast.com/>

Licensed Foresters

G. Lester Alpaugh
PO Box 211
Stockton, NJ 08559
Hunterdon County
(609) 397-0615

Andrew Bennett
PO Box 790
Lafayette, NJ 07848
Sussex County
(973) 729-7430
<https://www.ridgeandvalleyforest.com/>

Dylan Borger
PO Box 790
Lafayette, NJ 07848
Sussex County (570) 730-1977
<https://www.ridgeandvalleyforest.com/>

Thomas S. Broddle
217 Hickory Corner Rd
Milford, NJ 08848
Hunterdon County
(908) 996-2333

E. Joseph Bruschetta
1178 Bridge Rd
Phillipsburg, NJ 08865
Warren County
(908) 475-8466

Donald Donnelly
650 Jackson Valley Rd
Oxford, NJ 07863
Warren County
(908) 752-2538

Thomas D. Doty
45 Lilac Dr
Flemington, NJ 08822
Hunterdon County
(973) 813-3222

Joseph Dunn
49 Millbrook-Stillwater Rd
Blairstown, NJ 07825

Lorens D. Fasano
PO Box 72
Brookside, NJ 07926
Morris County
(973) 214-8294

G. Mike Fee
10 Paulinskill Rd
Hardwick, NJ 07825
Warren County
(908) 362-5565

William Grundmann
151 County Rd
Frenchtown, NJ 08825
Hunterdon County
(908) 309-6611
<https://www.organicplantcarellc.com/>

Kris Hasbrouck
9 East Buena Vista Way
Bloomington, NJ 07403
Passaic County
(201) 819-6454

Thomas Koepfel
PO Box 54
Pequannock, NJ 07440
Morris County
(973) 633-0360

John D. Linson
PO Box 6089
West Orange, NJ 07052
Essex County
(973) 766-2143

Robert A. Sidor
154 President St
Passaic, NJ 07055
Passaic County
(973) 356-8828

Timothy J. Slavin
319 Route 515
Stockholm, NJ 07460
Sussex County
(973) 697-6646

Douglas Tavella
PO Box 313
Newton, NJ 07860
Sussex County
(570) 350-5359

Richard S. Wolowicz
4 Maude Lane
Hackettstown, NJ 07840
Warren County
(973) 220-6797

Veterinarians

Dr. Carole Edwards AVCA, CHI, FIAMA
Specialty: Equine
PO Box 232
Frenchtown, NJ 08825
Hunterdon County
(908) 575-7834
<https://www.carole-edwards.com>

Mountain Pointe Equine Veterinary Services
Specialty: Equine
14 Schooleys Mountain Rd
Long Valley, NJ 07853
Morris County
(908) 269-8451
<https://www.mountainpointequine.com>

Woods End Equine Veterinary Services
Specialty: Equine
67 Rose Morrow Rd
Wantage, NJ 07461
Sussex County
(973) 209-4994
<https://www.woodsenequine.com>

Equihart Veterinary Services
Specialty: Equine
PO Box 215
Califon, NJ 07830
Hunterdon County
(732) 616-6188
<https://www.equiheartvet.com>

White

§ 65-1

FARMING

§ 65-1

Chapter 65

FARMING

**ARTICLE I
Right to Farm**

§ 65-1. Purpose.

§ 65-2. Definitions.

§ 65-3. Protection of farming and agricultural activities.

§ 65-4. Complaints; mediation.

§ 65-5. Composition of the Agricultural Protection Committee; terms.

§ 65-6. Deed notice.

[HISTORY: Adopted by the Township Committee of the Township of White: Art. I, 8-8-1997. Amendments noted where applicable.]

GENERAL REFERENCES

Land use — See Ch. 71.

**ARTICLE I
Right to Farm
[Adopted 8-8-1997]**

§ 65-1. Purpose.

The purpose of this article in keeping with the policy of the New Jersey Legislature, as expressed in the Right to Farm Act, N.J.S.A.4:1C-1 et seq., is to conserve, protect and encourage the development and improvement of agricultural lands within the township for the production of food and other agricultural products and the preservation of open space and to protect and

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encourage the viability of the agricultural industry by establishing a positive agricultural business climate in order to promote agricultural production to serve the interests of all citizens of White Township. It is the purpose of this article to help reduce the loss of agricultural land in White Township by protecting commercial farms operated in accordance with acceptable methods and techniques of agricultural production from nuisance actions, while at the same time acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in the State of New Jersey.

§ 65-2. Definitions.

As used in this article, the following terms shall have the meanings indicated:

ACCEPTABLE MANAGEMENT PRACTICES — Agricultural management practices recommended or endorsed by the State Agricultural Development Committee and all relevant federal or state statutes or rules and regulations adopted pursuant thereto.

COMMERCIAL FARM — Any operation producing, with the exception of sale, agricultural or horticultural products worth \$500 or more annually and which meet the eligibility requirements for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A.54:4-23.1 et seq.

NUISANCE — Any private action which unreasonably interferes with the comfortable enjoyment of another's property, which may be enjoined or abated, and for which the injured or affected property owner may recover damages.

§ 65-3. Protection of farming and agricultural activities.

- A. In all relevant actions filed subsequent to the adoption of this article, it shall be presumed that a commercial farm or agricultural use, structure or activity in connection therewith which is conducted or located within White Township and which conforms to acceptable agricultural management practices and which does not pose a direct threat to public health and safety shall not constitute a public or private nuisance, nor shall any such use, activity, or structure be deemed to otherwise invade or interfere with the use and enjoyment of any other land or property or pose an unusual or unreasonable threat to persons.
- B. Any agricultural use or common farmsite activity which conforms to acceptable agricultural management practices, when reasonable and necessary for the operation of the commercial farm, may occur on holidays, Sundays and weekdays, at night and in the day, subject to the restrictions and regulations of the township's Zoning Ordinance,¹ state and township health and sanitary codes and state and federal environmental regulations.
- C. Agricultural uses and common farmsite activities specifically protected by this article include but are not limited to production, harvesting, storage, grading, packaging and processing of farm products; wholesale and retail marketing of crops, plants, animals and other related commodities; the use and applications of techniques and methods of soil preparation and management; fertilization; weed, disease and pest control; disposal of farm waste; irrigation, drainage and water management; and grazing.

¹ Editor's Note: See Ch. 71, Land Use.

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§ 65-4. Complaints; mediation.

- A. When the township is in receipt of a complaint alleging that an agricultural use, structure or activity in connection with a commercial farm operation constitutes a nuisance or is not in conformance with acceptable management practices as defined herein, the Township Committee may refer the complaint to the duly appointed Agricultural Protection Committee for mediation.
- B. Upon referral of such a complaint by the Township Committee to the Agricultural Protection Committee, the Committee shall invite the affected parties to discuss the nature of the complaint, its reasonableness or unreasonableness in light of acceptable management practices and any solution or remedy which will satisfy the aggrieved party without interfering with or discouraging the operation of the commercial farm against which the complaint was registered. Determination of whether the farm is following acceptable management practices shall be made by the State Agricultural Development Committee. The results of the meeting shall be nonbinding upon either party and shall not abridge the right of either party to take legal action concerning the complaint.

§ 65-5. Composition of the Agricultural Protection Committee; terms.

- A. The Agricultural Protection Committee shall consist of five members.
- B. The members of the Agricultural Protection Committee shall serve for terms of two years. If a member dies or retires from the Committee before the term is up, the member who takes his or her place shall serve the unexpired term.

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§ 65-6. Deed notice. [Amended 8-2-2001]

Whenever any farm property eligible for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq., is subdivided, or a new major or minor subdivision abuts such farm property, or a new major or minor subdivision contains space of at least five acres in size not owned by individual homeowners or a homeowners' association, then the following language shall be inserted in the deeds to all lots:

The grantee hereby acknowledges notice that there are presently or may in the future be farm uses adjacent or in close proximity to the above-described premises. The grantee further acknowledges that the Township of White has adopted a Right-to-Farm Ordinance establishing acceptable farming activities which may result in the emanation of noise, odors, dust and fumes caused when such activities are conducted in accordance with recognized agricultural practices. Such activities include, but are not limited to, the production, harvesting, storage, grading, packaging and processing of crops, farm and horticultural products; the wholesale and retail marketing of crops, plants, livestock and other related commodities; the use and application of techniques and methods of soil preparation and management; fertilization; weed, disease and pest control by aerial and ground spraying; the spreading of manure and chemical and organic fertilizers; disposal of farm waste; irrigation, drainage and water management; and grazing. The grantee further acknowledges that such activities may occur on holidays, weekends, and at all times of the day, including early morning, evening and nighttime hours. By acceptance of this conveyance, the grantee does hereby waive objection to such activities.

**ORDINANCE TO AMEND AN ORDINANCE ENTITLED
"FARMING", CHAPTER 65 OF THE CODE OF THE TOWNSHIP OF WHITE**

BE IT ORDAINED by the Township Committee of the Township of White that Chapter 65 of the Code of the Township of White, "Farming" be amended to read as follows:

65-6. Deed notice.

Whenever any farm property eligible for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1, et. seq., is subdivided, or a new major or minor subdivision abuts such farm property, or a new major or minor subdivision contains space of at least (5) acres in size not owned by individual homeowners or a homeowners' association, then the following language shall be inserted in the deeds to all lots:

The grantee hereby acknowledges notice that there are presently or may in the future be farm uses adjacent or in close proximity to the above-described premises. The grantee further acknowledges that the Township of White has adopted a Right-to-Farm ordinance establishing acceptable farming activities which may result in the emanation of noise, odors, dust and fumes caused when such activities are conducted in accordance with recognized agricultural practices. Such activities include, but are not limited to, the production, harvesting, storage, grading, packaging and processing of crops, farm and horticultural products; the wholesale and retail marketing of crops, plants, livestock and other related commodities; the use and application of techniques and methods of soil preparation and management; fertilization; weed, disease and pest control by aerial and ground spraying; the spreading of manure and chemical and organic fertilizers; disposal of farm waste; irrigation, drainage and water management; and grazing. The Grantee further acknowledges that such activities may occur on holidays, weekends, and at all times of the day, including early morning, evening and nighttime hours. By acceptance of this conveyance, the grantee does hereby waive objection to such activities.

Adopted: August 2, 2001

Inventory Tables

Inventory Table 1. Farm Assessed Property in White Township

Inventory Table 2. Targeted Farms and Farm Units in White Township

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
14	52.01	3B	OFF SPRING LANE	AAROE LYN PAUL	8.60	8.20	34.34
14	55	3B	OFF SPRING LANE	AAROE, LYN PAUL	25.00	26.14	
72	13	3B	20 ROUTE 46	AMIN, ARVIND & PATEL C PRAFULLA	113.94	107.56	
16	44	3B	369 HAZEN-OXFORD RD	APPLE MOUNTAIN RECREATION INC	123.00	209.23	249.41
16	46	3B	212 BUCKLEY AVE	APPLE MOUNTAIN RECREATION INC	47.29	40.18	
69	24.23	3B	43 TAMARACK RD	BABICH, RONALD P	18.10	18.60	
10	5	3B	RIDGE RD	BELBY, KATHRYNE A	8.30	7.77	36.78
10	1	3B	1386 RIDGE RD	BELBY, MICHAEL	35.41	29.01	
63	2	3B	576 CR 519	BELBY, MICHAEL	9.19	8.79	
49	3	3B	BRASS CASTLE RD	BELBY, MICHAEL E & KATHRYNE A	5.15	7.05	
18	18	3B	350 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	35.17	33.57	134.95
18	19	3B	356 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	0.98	2.78	
18	21	3B	366 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	0.27	0.34	
31	14	3B	CR 519	BILYK FAMILY LIMITED PARTNERSHIP	52.33	49.23	
31	15	3B	357 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	8.49	8.15	
47	11	3B	OFF HAZEN-BELVIDERE RD	BILYK FAMILY LIMITED PARTNERSHIP	10.00	8.92	
48	13	3B	928 BRASS CASTLE RD	BILYK FAMILY LIMITED PARTNERSHIP	32.85	31.97	
68	60	3B	CR 519	BLANCHE, FRANK T & JODI A	8.82	8.02	
10	58	3B	12 HEMLOCK LA	BLEMNER-HOEHNE, LLC	51.78	58.43	
47	13	3B	53 PEQUEST RD	BODOLSKY, THOMAS & JAYNE	15.97	14.98	
56	4	3B	227 UPPER SAREPTA ROAD	BOHRER, WILLIAM	19.31	16.56	
68	25	3B	MOUNTAIN LAKE RD	BULLOCK, CAROL	0.97	2.65	
69	1	3B	208 MOUNTAIN LAKE RD	BULLOCK, ROBERT E & JANET	73.53	79.67	
60	13	3B	CR 519	BULLOCK, CAROL A	9.90	10.16	
14	50.01	3B	OFF SPRING LANE	BURD DONALD EST. & GUY N.	5.00	5.58	35.15
14	50	3B	OFF SPRING LANE	BURD, DONALD EST. & GUY N.	30.60	29.57	
62	3	3B	569 CR 519	CAPRIO REAL ESTATE TRT%SUSAN YETTER	20.23	19.50	
69	4	3B	MOUNTAIN LAKE RD	CAPRIO REAL ESTATE TRT%SUSAN YETTER	60.90	62.42	
18	39	3B	6 RESERVOIR LANE	CAVITCH, SHAWN J	5.85	6.70	
59	2.04	3B	HOPE CROSSING RD	CERBONE, NICHOLAS T & GLADYS	6.88	7.55	
47	9	3B	141 PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	12.01	12.86	174.61
47	9.09	3B	PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	9.50	9.29	
47	9.10	3B	PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	9.75	9.56	
47	9.11	3B	PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	25.48	24.04	
47	10.01	3B	181 PEQUEST DR	CHAMBERLAIN, EVERETT A	1.57	1.72	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
47	9.08	3B	PEQUEST DR	CHAMBERLAIN, EVERETT A & JUDITH L	9.15	8.99	
47	10	3B	BRASS CASTLE RD	CHAMBERLAIN, EVERETT C	109.69	106.64	
47	10.02	3B	185 PEQUEST DR	CHAMBERLAIN, JUDITH L	1.49	1.51	
10	27	3B	13 LOMMASON GLEN RD	CLEMENTE, MICHAEL S	16.00	15.22	15.33
10	27.04	3B	LOMMASON GLEN RD	CLEMENTE, MICHAEL S	0.11	0.11	
7	2	3B	3259 CR 519	CLINE, LORRAINE	25.67	22.13	24.65
9	5	3B	CR 519	CLINE, LORRAINE	2.53	2.52	
14	51.01	3B	33 HARTMANS TRAIL	COOK,BRIAN D & LAURA J.	7.75	9.63	
52	25	3B	6 BROOKSIDE AVE	COSTELLO FAMILY TRUST	1.58	2.07	
42	5	3B	ROUTE 46	CRAMER, DAVID C & STEVEN L	21.63	20.87	
64	8	3B	RUTHERFORD DR	CRAMER, DAVID C & STEVEN L	43.60	42.51	
10	40	3B	OFF CASTNERS RD	CREVELING, ERIC	11.05	11.26	18.03
10	22	3B	57 LOMMASON GLEN RD	CREVELING, ERNEST & MOLLIE	7.24	6.77	
10	24	3B	43 LOMMASON GLEN RD	CREVELING, ERNEST & MOLLIE	20.00	16.49	
12	1	3B	122 BUCKHORN DR	DEMETER, FRANK	19.60	19.59	65.95
12	14	3B	OFF BUCKHORN DR	DEMETER, FRANK	0.63	1.10	
12	15	3B	144 BUCKHORN DR	DEMETER, FRANK	19.24	18.64	
12	2	3B	146 BUCKHORN DR	DEMETER, FRANK	23.46	26.61	
13	35	3B	BUCKHORN DR	DEMETER, FRANK & JOHNSON, ELLEN M	11.59	14.67	
11	1	3B	CASTNERS RD	DICKERSON JOHN & LAURIE	13.66	13.57	
15	5.11	3A	12 LISA CT	DISCAFANI, ANDREW & VALARIE	1.00	2.99	
55	3.05	3B	29 UPPER SAREPTA RD	DOMINGUES, LEONEL	15.60	18.33	
52	10	3B	MANUNKA CHUNK RD	DSM NUTRITIONAL PRODUCTS INC	99.84	251.41	269.87
52	12	3B	OFF ROUTE 46	DSM NUTRITIONAL PRODUCTS INC	19.60	18.46	
69	17	3B	140 BEECHWOOD RD	EGAN,WILLIAM R JR & REGAL,ANN MARIE	2.00	2.88	15.64
69	17.01	3B	144 BEECHWOOD RD	EGAN,WILLIAM R JR & REGAL,ANN MARIE	11.83	12.76	
69	24	3B	53 TAMARACK RD	FERRAZ, SUSSY GREIZY & ANTONIO A	6.05	37.67	
63	3	3B	568 CR 519	FLOWERLAND REALTY, LLC	8.00	9.83	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
51	4	3B	WATER ST	FRATEZI, BRUCE P & JOAN H	20.29	22.64	23.83
46	30.01	3B	WATER ST	FRATEZI, JOAN H & BRUCE P	1.22	1.19	
56	4.01	3B	201 UPPER SAREPTA RD	GALATIANOS, GUS	32.46	36.26	
72	24	3B	OFF FOOTHILL LANE	GARRIQUES, LENARD & KATHLEEN	8.78	8.34	19.27
72	27	3B	OFF FOOTHILL LANE	GARRIQUES, LENARD & KATHLEEN	1.54	1.56	
72	23	3B	2 ROUTE 46	GARRIQUES, LENARD A & KATHLEEN A	8.67	9.36	
54	6.07	3B	77 SAREPTA RD	GESCHWINDER,JOHN &VALERIE PATTERSON	5.48	6.70	
18	60	3B	SUMMERFIELD RD	GLASS ANNA % DIANE GLASS	148.10	138.45	
60	8.01	3B	HOPE CROSSING RD	GLENN, JAMES L & KARIN	5.74	6.74	
13	7	3B	SUMMERFIELD RD	GREGORY SCOTT C. & BRENDA E.	11.50	11.19	
34	21.01	3B	14 BUTTZVILLE RD	HANSEL CHARLES F. 3RD	34.64	35.28	
11	3	3B	68 BUCKHORN DR	HARRIS, CHARLES E & CATHERINE K	15.89	15.01	
13	18	3B	239 BUCKHORN DR	HAUSAMANN, JAMES C & CYNTHIA	8.60	9.74	
18	4.01	3B	134 CR 519	HAYES,S/COOPER,A/VALLER J	2.20	2.20	46.53
18	4.02	3B	144 CR 519	HAYES,S/COOPER,A/VALLER J	4.78	4.55	
18	4.03	3B	140 CR 519	HAYES,S/COOPER,A/VALLER J	38.58	39.77	
18	51	3A	395 BUCKHORN DR	HENDRICKSON, CLIFFORD A & DENISE M	-	7.17	
31	1	3B	949 BRASS CASTLE RD	HENSLER FARMS, LLC	3.30	3.29	64.47
31	14.01	3B	305 CR 519	HENSLER FARMS, LLC	59.34	59.80	
49	2	3B	966 BRASS CASTLE RD	HENSLER FARMS, LLC	1.43	1.38	
42	9	3B	7 TITMAN RD	HOFFMAN, EUGENE E	0.22	0.39	86.55
43	2	3B	ROUTE 46	HOFFMAN, EUGENE E	5.53	7.67	
63	9	3B	ROUTE 46	HOFFMAN, EUGENE E	22.22	43.83	
64	6	3B	RUTHERFORD DR	HOFFMAN, EUGENE E	27.74	34.67	
13	5	3B	175 SUMMERFIELD ROAD	HUMMER TIMOTHY & TERRI	34.48	33.95	
21	6	3B	FOUL RIFT RD	HUMMER, RICHARD JR	118.30	123.26	127.55
23	8	3B	157 FOUL RIFT RD	HUMMER, RICHARD JR	0.75	0.86	
24	7	3B	159 FOUL RIFT RD	HUMMER, RICHARD JR	4.25	3.43	
17	42.02	3A	15 MELODY LA	IDENDEN, JOHN E JR	1.00	9.28	
15	11.03	3B	BUCKLEY AVE	JARRETT KEITH % JMM	1.50	1.50	33.37
15	11	3B	211 BUCKLEY AVE	JARRETT, KEITH D	3.44	2.35	
15	14	3B	NINEBARK	JARRETT, KEITH D	5.20	5.06	
15	16	3B	15 NINEBARK	JARRETT, KEITH D	10.89	8.38	
15	17	3B	21 NINEBARK	JARRETT, KEITH D	16.16	16.06	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
69	5	3B	MOUNTAIN LAKE RD	JOHNSON, CRAIG B & SUSAN R	45.00	45.81	
11	9	3B	MONTANA RD	JONES, MITCHELL	0.87	0.98	
14	9	3B	240 BUCKHORN DR	KANE, JOHN & JUDITH	54.78	53.99	
71	8	3B	FREE UNION RD	KEATING, GARRETT % MARK KEATING	18.42	19.47	24.81
72	31	3B	FREE UNION RD	KEATING, GARRETT % MARK KEATING	5.41	5.33	
10	26	3B	17 LOMMASON GLEN RD	KELLEY, VICTOR & DIANA	1.47	1.24	26.85
18	68.01	3B	LOMMASON GLEN	KELLEY, VICTOR K & DIANA	7.02	6.36	
18	69	3A	32 LOMMASON GLEN RD	KELLEY, VICTOR K & DIANA L	1.00	19.25	
67	1	3B	UPPER SAREPTA RD	KILTS, DARREN THOMAS	43.35	44.19	86.43
67	3	3B	236 UPPER SAREPTA RD	KILTS, DARREN THOMAS	43.56	42.24	
61	5	3B	114 SAREPTA RD	KIMBALL, KENT D	45.61	44.62	50.51
54	6.08	3B	SAREPTA RD	KIMBALL, KENT D.	6.08	5.89	
14	24.02	3B	591 BRASS CASTLE RD	KWIATEK, MARK & LAUREN	9.62	11.34	12.59
14	24.01	3B	595 BRASS CASTLE RD	KWIATEK, MARK A & LAUREN	1.05	1.25	
59	2.05	3B	HOPE CROSSING RD	LARNEY, MICHAEL & MARGARET ANN	6.89	8.28	
66	5	3B	MOUNTAIN LAKE RD	LARNEY, MICHAEL & MAZA, LAURA	8.91	9.60	
69	16	3B	150 BEECHWOOD RD	LINDA C JAKOBSEN TRST % M WALGE	8.68	9.01	
18	14	3B	284 CR 519	MACKEY DEVLEN R & MACKEY HOLLY	49.38	48.11	91.59
18	15	3B	296 CR 519	MACKEY DEVLEN R & MACKEY HOLLY	45.59	43.48	
67	21	3B	OFF HOPE-BRIDGEVILLE RD	MATARAZZO, ROBERT & LAURA	0.46	0.64	166.70
67	17	3B	703 CR 519	MATARAZZO, ROBERT J & LAURA R	96.31	52.74	
67	18	3B	783-785 CR 519	MATARAZZO, ROBERT J & LAURA R	22.53	70.65	
67	19	3B	CR 519	MATARAZZO, ROBERT J & LAURA R	48.13	42.67	
18	68.02	3B	LOMMASON GLEN RD	MATTHEWS, IVAN & BETTY REV LIV TR	5.17	6.27	
18	70	3B	48 LOMMASON GLEN RD	MATTHEWS, TIMOTHY	3.04	3.14	
18	95	3B	CR 519	MATTHEWS, TIMOTHY I	12.77	14.01	33.13
18	96	3B	CR 519	MATTHEWS, TIMOTHY I	18.84	19.12	
16	23	3B	BRASS CASTLE RD	MATTHEWS, TIMOTHY I & LYNDA	67.06	70.77	
16	12	3B	BRASS CASTLE ROAD	MATTHEWS, TIMOTHY & LYNDA	35.92	39.15	
33	20.01	3B	372 HAZEN-OXFORD ROAD	MCCONNELL, EDWARD A & MARY	18.79	15.91	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
59	11	3B	120 SAREPTA RD	MCCREA, DAVID W & LETITIA M	15.41	17.54	
13	11.01	3B	131-145 SUMMERFIELD RD	MCEVOY JANET	21.43	20.90	113.89
13	17.01	3B	BUCKHORN DR	MCEVOY, GERARD V & JANET L	22.40	23.79	
13	11	3B	87 SUMMERFIELD RD	MCEVOY, JANET & GERARD V	54.19	48.50	
18	58	3A	110 SUMMERFIELD RD	MCEVOY, JANET & GERARD V	1.00	1.01	
18	58	3B	SUMMERFIELD RD	MCEVOY, JANET & GERARD V	19.53	19.70	
10	30	3B	32 BUCKHORN DR	MCKENNA, JESSICA DALRYMPLE & RACHEL	3.85	3.83	41.50
13	24	3B	BUCKHORN DR	MCKENNA, JESSICA DALRYMPLE & RACHEL	37.30	37.67	
10	23	3B	47 LOMMASON GLEN RD	MCMULLEN, SHAWN R	9.50	9.42	
59	5	3B	HOPE CROSSING RD	MENEGUS, JASON & WALTER J	6.97	7.80	47.04
60	5	3B	623 CR 519	MENEGUS, RAYMOND N	5.00	5.10	
60	6	3B	HOPE CROSSING RD	MENEGUS, WALTER & MARIA	9.18	10.20	
60	6.01	3B	108 HOPE CROSSING RD	MENEGUS, WALTER J	6.50	6.32	
59	4	3B	HOPE CROSSING RD	MENEGUS, WALTER J & MARIA M	15.88	17.61	
68	65	3B	796 CR 519	MERCURIO, MICHAEL	7.90	9.58	
66	11	3B	51 GREEN POND RD	MOONEY, JAMES F & MARY T	17.01	18.37	
16	48.01	3B	250 BUCKLEY AVE	MOSKAL, HENRY & MARGARET	14.47	15.46	
10	17	3B	81 LOMMASON GLEN RD	MULLIGAN, KYLE	10.04	10.64	
12	12	3B	1 SPRING LA	NEW JERSEY AMERICAN WATER CO	27.94	25.43	
16	38	3B	HAZEN-OXFORD RD	NEWHOUSE, DAVID & BETTY J REV LV TR	23.58	26.16	
30	6.01	3B	231 CR 519	NIEUWENHUIS, RICHARD E & GERTRUDE A	5.01	5.19	10.62
30	6.02	3B	231 CR 519	NIEUWENHUIS, RICHARD E & GERTRUDE A	5.55	5.43	
54	6.04	3B	69 SAREPTA RD	OLIVEIRA HELDER & MARGARIDA	8.18	9.26	
17	60	3B	BUCKHORN DR	OLIVEIRA, PAULO & ADRIANA	6.48	8.10	
68	35	3B	MOUNTAIN LAKE RD	OLIVER ANNA C/O FRED OLIVER	57.03	60.13	62.61
66	8	3B	79 GREEN POND RD	OLIVER, ANNA C/O FRED OLIVER	2.36	2.48	
18	74	3B	88 LOMMASON GLEN RD	OTT, HOWARD B TRST/MARY W WARDEN	36.86	34.34	
16	57	3B	HAZEN-OXFORD RD	PARR GARY D & DORCAS E	4.94	4.22	
60	7	3B	HOPE CROSSING RD	PENSACK, SHIRLEY A	5.20	5.98	
33	10.03	3B	QUARRY RD	PERRY, VALERIE	3.23	2.91	13.64
33	10	3B	QUARRY RD	PERRY, VALERIE R	10.13	10.74	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
17	46	3B	BRASS CASTLE ROAD	PETERSEN, RONALD	8.03	9.12	23.69
17	47	3B	BRASS CASTLE RD	PETERSEN, RONALD	7.40	7.49	
17	30	3B	659 BRASS CASTLE RD	PETERSEN, RONALD & SILVANA K	7.74	7.09	
66	7	3B	MOUNTAIN LAKE RD	PHILSON DAVID & BONNIE	9.50	10.13	
21	11	3B	FOUL RIFT RD	POSTMA, JETSKE	35.86	37.40	
72	5.01	3B	100 FREE UNION RD	PROPSNER, MARTHA	7.16	9.17	83.19
72	5	3B	98 FREE UNION ROAD	PROPSNER, MARTHA, NANCY, MARK & PAUL	68.04	74.01	
34	16	3B	12 MILL RD	PWC INC	25.67	26.84	
55	8	3B	OFF ROUTE 46	QUICK, JEFFREY	43.26	43.57	
56	9	3B	OFF ROUTE 46	QUICK, JEFFREY	55.72	52.67	
33	16	3B	HAZEN-OXFORD RD	RACE, SAMUEL R & JEAN A	12.00	13.11	
1	1	3B	S. FOUL RIFT ROAD	REALTY CO OF PA%TALEN GENERATION LL	1.94	2.02	553.40
1	2	3B	S. FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	1.06	1.37	
2	2	3B	S. FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	0.26	0.23	
2	3	3B	S. FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	1.00	0.79	
21	10	3B	FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	9.29	9.59	
3	1	3B	S. FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	9.00	8.05	
3	2	3B	S. FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	0.37	0.36	
7	11	3B	CR 519	REALTY CO OF PA%TALEN GENERATION LL	135.70	131.94	
7	16	3B	39 FOUL RIFT RD	REALTY CO OF PA%TALEN GENERATION LL	95.15	96.12	
7	3	3B	CR 519	REALTY CO OF PA%TALEN GENERATION LL	88.55	94.92	
7	4	3B	3271 CR 519	REALTY CO OF PA%TALEN GENERATION LL	91.75	92.57	
7	5	3B	S. FOUL RIFT ROAD	REALTY CO OF PA%TALEN GENERATION LL	89.50	95.47	
9	4	3B	CR 519	REALTY CO OF PATALEN GENERATION LL	19.88	19.96	
18	58.03	3B	142 SUMMERFIELD RD	REDFERN, THOMAS & JILL JOHSON	18.69	21.34	
18	34	3B	769 BRASS CASTLE ROAD	RODGERS, GAIL	55.90	53.71	
67	5.02	3B	198 UPPER SAREPTA RD	RODRIGUEZ, JOSE & HERMINIA	6.06	4.98	18.16
67	5.03	3B	UPPER SAREPTA RD	RODRIGUEZ, JOSE & HERMINIA	5.66	6.67	
67	5.04	3B	186 UPPER SAREPTA RD	RODRIGUEZ, JOSE & HERMINIA	6.53	6.51	
67	4	3B	216 UPPER SAREPTA RD	ROEDEL, JOYCE M	33.90	33.81	
7	14	3B	123 CR 519	ROMANI MARGARET EST C/O HAYES, S.	70.80	70.87	
10	54	3B	OFF LOMMASON GLEN	ROSE, HUGH	13.10	12.32	37.40
10	55	3B	OFF LOMMASON GLEN	ROSE, HUGH	13.30	13.42	
10	52	3B	LOMMASON GLEN	ROSE, HUGH M & KAREN L	6.68	7.37	
10	53	3B	LOMMASON GLEN	ROSE, HUGH M & KAREN L	4.09	4.29	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
10	7	3A	14 WHITE RD	SABO, JOHN J III & ANN MARIE	1.00	10.68	16.36
10	7.01	3B	16 WHITE RD	SABO, JOHN J III & ANN MARIE	6.07	5.69	
18	57	3B	SUMMERFIELD RD	SALA,ROBERT P & JANET F	9.00	9.44	
27	1	3B	200 CR 620	SAMA PROPERTIES LLC	1.30	0.68	19.17
28	2	3B	188 CR 620	SAMA PROPERTIES LLC	8.20	7.85	
28	2.01	3B	140 CR 620	SAMA PROPERTIES, LLC	10.10	10.63	
16	48	3B	270 BUCKLEY AVE	SGS A LIMITED PART/MANSFIELDSELF S	42.64	42.31	
62	20.01	3B	HOPE CROSSING RD	SHOEMAKER KEVIN S & BEVERLY L	5.10	6.11	
71	9	3B	FREE UNION RD	SHOEMAKER MYRNA K	66.88	65.84	170.31
71	3	3B	TAMARACK ROAD	SHOEMAKER, HOWARD & MYRNA	56.25	60.75	
71	15	3B	117 FREE UNION RD	SHOEMAKER, KEVIN & KYLE & MYRNA	40.79	43.73	
72	13.01	3B	64 ROUTE 46	SHOEMAKER, JOSHUA	8.00	7.44	16.20
72	28	3B	ROUTE 46	SHOEMAKER, JOSHUA	7.13	8.75	
32	11	3B	CR 519	SHOEMAKER, HOWARD M & MYRNA K	9.65	25.31	
64	2	3B	CR 519	SHOEMAKER, HOWARD, KEVIN, & KYLE	32.66	30.82	
17	43	3B	SUMMERFIELD ROAD	SICO, DOMINIC	28.05	28.96	
18	58.02	3B	168 SUMMERFIELD RD	SIMONE, PASCAL	20.65	20.49	
30	2	3B	68 CR 620	SMITH, EARL RICHARD	31.53	29.69	
21	7.02	3B	FOUL RIFT ROAD	SMITH JAMES & KAREN	5.35	6.47	91.67
21	7	3B	FOUL RIFT RD	SMITH, JAMES W & KAREN L	74.69	85.19	
12	20	3B	OFF MONTANA RD	SMITH JOHN H & JEAN M	7.21	6.83	
10	11	3B	5 LOWER GLEN RD	SMITH, DENNIS J & THOMAS E	10.74	11.06	53.22
10	56	3B	OFF LOMMASON GLEN	SMITH, DENNIS J & THOMAS E	9.93	10.24	
10	57	3B	OFF CR 519	SMITH, DENNIS J & THOMAS E	8.10	8.26	
10	9	3B	8 LOWER GLEN RD	SMITH, GLENN A	21.41	23.66	
30	1	3B	2 OLD PHILLIPSBURG RD	SMITH, JAMES & KAREN	31.03	30.77	
30	5	3B	CR 519	SMITH, JAMES W & KAREN	10.45	9.02	
67	5	3B	183 SAREPTA RD	SMITH, RICKY	25.00	25.52	
67	6	3B	170 UPPER SAREPTA RD	SMITH, RICKY	7.30	8.13	
56	1	3B	243 UPPER SAREPTA RD	SPENCER, CRAIG & DOROTHEA	11.97	23.35	
69	35.01	3B	BEECHWOOD RD	STECKEL, TRUDY L,HARRY W & RYAN W	5.70	5.47	
10	29	3B	BUCKHORN DR	STEINHARDT, DOUGLAS J	38.84	37.54	
10	37	3B	OFF CASTNERS RD	STEINHARDT, DOUGLAS J	4.50	4.05	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
10	39	3B	18 BUCKHORN DR	STEINHARDT, DOUGLAS J	7.63	9.24	130.70
10	32	3B	44 BUCKHORN DR	STEINHARDT, THERESE A	2.31	2.20	
10	33.01	3B	49 CASTNERS RD	STEINHARDT, THERESE A	55.00	58.65	
10	34	3B	CASTNERS RD	STEINHARDT, THERESE A	10.12	9.92	
10	35	3B	CASTNERS RD	STEINHARDT, THERESE A	9.35	9.10	
67	23	3B	OFF OSMUN RD-KNOWLTON TWP	STONE, HARRY	3.70	3.92	
67	16.B	3A	643 CR 519	THOMPSON, PERIE THOMAS & MARY K	-	-	
59	1	3B	121 HOPE CROSSING RD	THOMPSON, ROBERT & GLORIA	43.34	43.68	51.21
68	54	3B	668 CR 519	THOMPSON, ROBERT W & JOAN L	6.50	7.53	
32	15	3B	141 E QUARRY RD	TILCON C/O S O'REILLY	3.72	36.70	271.14
32	16	3B	E QUARRY RD	TILCON C/O S O'REILLY	11.41	11.99	
33	21	3B	E QUARRY RD	TILCON C/O S O'REILLY	16.68	15.94	
33	22	3B	E QUARRY RD	TILCON C/O S O'REILLY	54.66	85.63	
33	23	3B	E QUARRY RD	TILCON C/O S O'REILLY	3.64	51.12	
34	19	3B	MT. PISGAH AVE	TILCON C/O S O'REILLY	51.54	55.03	
34	20	3B	101 E QUARRY RD	TILCON NEW YORK, INC	14.92	14.73	
18	7	3B	196 CR 519	TISHUK, WILLIAM % LINDA STETTLER	131.96	133.77	
14	5.03	3B	58 SPRING LA	TOCCE, FREDERICK W & MALLE	5.35	4.20	9.66
14	51	3B	SPRING LA	TOCCE, FREDERICK W & MALLE	3.30	5.46	
32	19	3A	39 W QUARRY RD	TUCCI, JOHN & VALERIE	1.00	30.35	
32	10	3B	470 CR 519	UNANGST, OSCAR	87.90	87.85	160.71
47	1	3B	CR 519 & PEQUEST DR	UNANGST, OSCAR	7.25	9.95	
47.01	5	3B	BRASS CASTLE RD	UNANGST, OSCAR	14.20	15.45	
32	9	3B	466 CR 519	UNANGST, OSCAR & LORRAINE	3.70	3.32	
47	3	3B	21 PEQUEST DR	UNANGST, OSCAR & LORRAINE	19.79	18.94	
48	1.01	3B	489 CR 519	UNANGST, OSCAR & LORRAINE S	25.16	25.19	
21	3	3B	135 CR 620	VAN HORN, LISA	20.16	28.00	120.55
21	4	3B	158 FOUL RIFT ROAD	VAN HORN, LISA	96.67	92.56	
21	12	3B	110-112 FOUL RIFT RD	VAN HORN, LISA	93.03	85.47	
54.01	2	3B	1 SAREPTA RD	WADE, ROBERT E TRUSTEE	27.18	26.96	
14	49	3B	72 SPRING LA	WATERFALL RIDGE,LLC/GODUSCH,ROBERT	25.35	24.26	
30	8	3B	257 CR 519	WHITETOWN REALTY	96.78	105.54	106.74
30	11	3B	CR 519	WHITETOWN REALTY, LLC	0.98	1.20	

Inventory Table 1A. Unpreserved Farmland in White Township (Class 3A, 3B)

*Farm Parcel: Individual Lot

**Farm Unit: Collection of Lots Comprising a Farm

Block	Lot	Class	Location	Owner's Name	Farm Parcel*		Farm Unit**
					Acres (Tax Data)	Acres (GIS)	Acres (GIS)
17	40	3A	14 SUMMERFIELD RD	WILSON, GEORGE M & CAROL J	1.00	17.82	
10	46	3A	LOMMASON GLEN	WOOD,LAWRENCE ROBERT & LORI KLAMNER	-	24.66	
14	22	3A	13 SUMMERFIELD RD	WRIGHT, JEFFREY C & KAPANKA, LAURA	1.00	12.76	
18	8	3B	CR 519	WYCKOFF, JOHN C ETALS%M HAYCOCK	113.62	111.03	280.64
18	9	3B	248 CR 519	WYCKOFF,JOHN C & MORRIS,JUDY ETALS	120.61	122.80	
30	7	3B	CR 519	WYCKOFF,JOHN C &JUDY MORRIS ETALS	45.80	46.81	
67	22	3B	24 DOE HOLLOW LA	ZHENG YUAN INTERNATIONAL FLAGSHIP S	149.22	158.73	
				Total (Unpreserved Farmland):	6,402.98	7,041.10	Acres
				Total (Preserved Farmland):	1,767.50	1,899.57	Acres
				Total Preserved Farmland (Class 3A, 3B):	1,618.99	1,753.92	Acres
				Total (Preserved Farmland-HDC/Conservation Easment/NJDEP Green Acres):	235.99	247.12	Acres
				Total Farm Assessed Land:	8,257.96	9,042.15	Acres
				Total (Unpreserved Farm Units):	4,472.32	Acres	
				Number of Farm Units:	52		

Inventory Table 1B. Preserved Farmland (Class 1, 2, 3A, 3B, 15C)

Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)
32	5	1	380 CR 519	HIONIS, CHRISTINA & PAT	13.77	13.26
32	8.01	1	418 CR 519	HIONIS, CHRISTINA & PAT	19.32	19.93
32	21	2	35 W QUARRY RD	HIONIS, CHRISTINA & PAT	95.95	92.96
18	13.03	15C	266 CR 519	TOWNSHIP OF WHITE	19.47	19.50
15	1	3B	512 BRASS CASTLE RD	BARTHA, THOMAS	28.00	34.21
47	7.03	3B	99 PEQUEST DR	BILYK HOLDINGS LLC	61.33	60.66
47	12	3B	BRASS CASTLE RD	BILYK HOLDINGS LLC	31.51	31.43
48	12	3B	BRASS CASTLE ROAD	BILYK HOLDINGS LLC	62.99	63.96
46	8	3B	ROUTE 46	BULLOCK, CAROL	10.21	8.54
69	3	3B	157 MOUNTAIN LAKE RD	BULLOCK, CAROL	63.91	64.08
62	7	3B	ROUTE 46	BULLOCK, CAROL A	91.10	98.95
32	8	3B	434 CR 519	DEBOER, ROBERT A	43.40	54.55
11	4	3B	DEMETER ROAD	DEMETER, FRANK	57.06	60.68
13	23	3B	BUCKHORN DR	DEMETER, FRANK	53.04	58.16
13	30	3B	95 BUCKHORN DR	DEMETER, FRANK	84.52	80.48
11	5	3B	BUCKHORN DR	DUCKWORTH ROBERT R	0.45	0.49
11	6	3B	76 BUCKHORN DR	DUCKWORTH ROBERT R	6.29	6.27
69	22	3B	118 BEECHWOOD RD	DUNNE, TIMOTHY & MIRIAM	73.66	77.89
14	4	3B	42 SPRING LA	ENZ CAPTIAL INVESTMENT LLC	33.54	33.61
14	52	3B	44 SPRING LA	ENZ CAPTIAL INVESTMENT LLC	4.68	5.33
10	33	3B	CASTNERS RD	ERHARDT, VERNON C. & BEVERLY M.	27.00	25.53
18	16	3B	298 CR 519	HENSLER FARMS, LLC	40.77	39.38
48	6.01	3B	CR 519	HENSLER-UNANGST FARMS, LLC	110.13	108.54
46	37	3B	140 PEQUEST DR	HOFFMANN-LA ROCHE INC	93.73	97.26
46	34	3B	ORCHARD ST	KOLIBAS, JEFFREY & KATHERINE	18.49	21.65
50	1	3B	194 ORCHARD ST	KOLIBAS, JEFFREY & KATHERINE	8.61	9.24
14	37	3B	583 BRASS CASTLE ROAD	MARTIN, KENNETH & ANNA M	82.33	83.49
14	38	3B	583 BRASS CASTLE ROAD	MARTIN, KENNETH & ANNA M	3.98	2.54
18	73	3B	76 LOMMASON GLEN RD	MATTHEWS TIMOTHY L & LYNDA	35.92	38.25
18	68	3B	LOMMASON GLEN RD	MATTHEWS, IVAN & BETTY REV LIV TR	37.90	46.91
18	83	3B	OFF LOMMASON GLEN	MATTHEWS, TIMOTHY	10.43	10.49
18	71	3B	58 LOMMASON GLEN RD	MATTHEWS, TIMOTHY & LYNDA	9.80	5.07
18	77	3B	CR 519	MATTHEWS, TIMOTHY I & LYNDA K	7.41	8.52
18	79	3B	CR 519	MATTHEWS, TIMOTHY I & LYNDA K	11.50	11.53
18	82	3B	CR 519	MATTHEWS, TIMOTHY I & LYNDA K	16.35	17.21
18	13	3B	268 CR 519	PARKS, JAMES R	43.44	43.89
16	42	3B	HAZEN-OXFORD RD	RACE, SAMUEL R & JEAN A	79.90	85.10

Inventory Table 1B. Preserved Farmland (Class 1, 2, 3A, 3B, 15C)

Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)
33	20	3B	374 HAZEN-OXFORD RD	ROTHMAN, ARTHUR R & JOAN E	14.75	15.12
33	20.02	3B	HAZEN-OXFORD RD	ROTHMAN, ARTHUR R & JOAN E	42.57	42.37
62	24	3A	464 ROUTE 46 & 40 HOPE CR	SHOEMAKER, HOWARD	-	77.72
62	20	3B	20 SAREPTA RD	SHOEMAKER, HOWARD & MYRNA K	46.99	46.21
71	17	3B	FREE UNION RD	SHOEMAKER, HOWARD & MYRNA K	22.56	23.34
67	16	3B	CR 519	THOMPSON, PERIE THOMAS & MARY K	39.28	41.32
47	5	3B	PEQUEST DR	UNANGST, OSCAR & LORRAINE	84.66	87.39
13	22	3B	175 BUCKHORN DR	WALBURN, JOHN J JR	24.81	26.60
				Total (Preserved Farmland):	1,767.50	1,899.57
				Total Preserved Farmland (Class 1, 2, 15C):	148.51	145.65
				Total Preserved Farmland (Class 3A, 3B):	1,618.99	1,753.92
16	45	3B	12F HAZEN-OXFORD RD.	ACCETTURO, MARIE A	21.11	18.29
14	17	3B	SUMMERFIELD RD	JARVIS ALBERT	60.80	60.01
13	21	3B	189 BUCKHORN DR	NEWHOUSE, DAVID	29.79	30.74
16	24	3B	794 BRASS CASTLE RD	NEWHOUSE, DAVID & BETTY J	-	6.64
16	24.15	3B	BRASS CASTLE ROAD	NEWHOUSE, DAVID & BETTY J REV LV TR	4.89	7.86
68	59	3B	682 CR 519	ZIKAS, ALEX T & MELISSA	18.34	20.89
				Farmland Preserved (HDC Easement):	134.93	144.42
55	3	3B	SAREPTA RD	BARKER, GARY & JACQUELINE A LARUE	32.26	34.35
72	6	3B	84 FREE UNION RD	CAMMAROTA, RUDOLPH O EST%M CAMMARC	57.98	58.09
				Farmland Preserved (Conservation Easement):	90.24	92.44
70	9	3B	99 BEECHWOOD RD	CHIRCOP, VINCENT TRSTEE CHIRCOP TRS	9.72	9.25
70	9.01	3B	95 BEECHWOOD RD	CHIRCOP, VINCENT TRSTEE CHIRCOP TRS	1.10	1.01
				Farmland Preserved (NJDEP Green Acres):	10.82	10.26

Inventory Table 2. Target Farms that Meet the Eligibility Criteria within the ADA

Block	Lot	Location	Owner	Acres (Tax Data)	Acres (GIS Data)	Farm	Acres (GIS)
31	14	CR 519	BILYK FAMILY LIMITED PARTNERSHIP	52.33	49.23	Bilyk Family	134.95
18	18	350 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	35.17	33.57		
47	11	OFF HAZEN-BELVIDERE RD	BILYK FAMILY LIMITED PARTNERSHIP	10.00	8.92		
31	15	357 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	8.49	8.15		
48	13	928 BRASS CASTLE RD	BILYK FAMILY LIMITED PARTNERSHIP	32.85	31.97		
18	19	356 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	0.98	2.78		
18	21	366 CR 519	BILYK FAMILY LIMITED PARTNERSHIP	0.27	0.34		
47	10	BRASS CASTLE RD	CHAMBERLAIN, EVERETT C	109.69	106.64	Chamberlain	174.61
47	10.01	181 PEQUEST DR	CHAMBERLAIN, EVERETT A	1.57	1.72		
47	10.02	185 PEQUEST DR	CHAMBERLAIN, JUDITH L	1.49	1.51		
47	9.11	PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	25.48	24.04		
47	9.09	PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	9.50	9.29		
47	9.10	PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	9.75	9.56		
47	9	141 PEQUEST DR	CHAMBERLAIN, EVERETT & JUDITH	12.01	12.86		
47	9.08	PEQUEST DR	CHAMBERLAIN, EVERETT A & JUDITH L	9.15	8.99		
9	5	CR 519	CLINE, LORRAINE	2.53	2.52	Cline	24.65
7	2	3259 CR 519	CLINE, LORRAINE	25.67	22.13		
31	14.01	305 CR 519	HENSLER FARMS, LLC	59.34	59.80	Hensler	64.47
49	2	966 BRASS CASTLE RD	HENSLER FARMS, LLC	1.43	1.38		
31	1	949 BRASS CASTLE RD	HENSLER FARMS, LLC	3.30	3.29		
21	6	FOUL RIFT RD	HUMMER, RICHARD JR	118.30	123.26	Hummer	127.55
23	8	157 FOUL RIFT RD	HUMMER, RICHARD JR	0.75	0.86		
24	7	159 FOUL RIFT RD	HUMMER, RICHARD JR	4.25	3.43		
67	3	236 UPPER SAREPTA RD	KILTS, DARREN THOMAS	43.56	42.24	Kilts	86.43
67	1	UPPER SAREPTA RD	KILTS, DARREN THOMAS	43.35	44.19		
54	6.08	SAREPTA RD	KIMBALL, KENT D.	6.08	5.89	Kimball	50.51
61	5	114 SAREPTA RD	KIMBALL, KENT D	45.61	44.62		
18	15	296 CR 519	MACKEY DEVLEN R & MACKEY HOLLY	45.59	43.48	Mackey	91.59
18	14	284 CR 519	MACKEY DEVLEN R & MACKEY HOLLY	49.38	48.11		
67	19	CR 519	MATARAZZO, ROBERT J & LAURA R	48.13	42.67	Matarazzo	166.70
67	21	OFF HOPE-BRIDGEVILLE RD	MATARAZZO, ROBERT & LAURA	0.46	0.64		
67	18	783-785 CR 519	MATARAZZO, ROBERT J & LAURA R	22.53	70.65		
67	17	703 CR 519	MATARAZZO, ROBERT J & LAURA R	96.31	52.74		

Inventory Table 2. Target Farms that Meet the Eligibility Criteria within the ADA

Block	Lot	Location	Owner	Acres (Tax Data)	Acres (GIS Data)	Farm	Acres (GIS)
13	17.01	BUCKHORN DR	MCEVOY, GERARD V & JANET L	22.40	23.79	Mcevoy	113.89
13	11	87 SUMMERFIELD RD	MCEVOY, JANET & GERARD V	54.19	48.50		
18	58	SUMMERFIELD RD	MCEVOY, JANET & GERARD V	19.53	19.70		
13	11.01	131-145 SUMMERFIELD RD	MCEVOY JANET	21.43	20.90		
18	58	110 SUMMERFIELD RD	MCEVOY, JANET & GERARD V	1.00	1.01		
59	5	HOPE CROSSING RD	MENEGUS, JASON & WALTER J	6.97	7.80	Menegus	47.04
60	6	HOPE CROSSING RD	MENEGUS, WALTER & MARIA	9.18	10.20		
60	6.01	108 HOPE CROSSING RD	MENEGUS, WALTER J	6.50	6.32		
60	5	623 CR 519	MENEGUS, RAYMOND N	5.00	5.10		
59	4	HOPE CROSSING RD	MENEGUS, WALTER J & MARIA M	15.88	17.61		
30	6.02	231 CR 519	NIEUWENHUIS, RICHARD & GERTRUDE	5.55	5.43	Nieuwenhuis	10.62
30	6.01	231 CR 519	NIEUWENHUIS, RICHARD & GERTRUDE	5.01	5.19		
33	10.03	QUARRY RD	PERRY, VALERIE	3.23	2.91	Perry	13.64
33	10	QUARRY RD	PERRY, VALERIE R	10.13	10.74		
7	16	39 FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	95.15	96.12	Realty CO	553.40
7	3	CR 519	REALTY CO OF PATALEN GENERATION	88.55	94.92		
7	5	S. FOUL RIFT ROAD	REALTY CO OF PATALEN GENERATION	89.50	95.47		
3	1	S. FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	9.00	8.05		
2	2	S. FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	0.26	0.23		
9	4	CR 519	REALTY CO OF PATALEN GENERATION	19.88	19.96		
3	2	S. FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	0.37	0.36		
21	10	FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	9.29	9.59		
7	4	3271 CR 519	REALTY CO OF PATALEN GENERATION	91.75	92.57		
7	11	CR 519	REALTY CO OF PATALEN GENERATION	135.70	131.94		
2	3	S. FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	1.00	0.79		
1	1	S. FOUL RIFT ROAD	REALTY CO OF PATALEN GENERATION	1.94	2.02		
1	2	S. FOUL RIFT RD	REALTY CO OF PATALEN GENERATION	1.06	1.37		
28	2	188 CR 620	SAMA PROPERTIES LLC	8.20	7.85	Sama	19.17
28	2.01	140 CR 620	SAMA PROPERTIES, LLC	10.10	10.63		
27	1	200 CR 620	SAMA PROPERTIES LLC	1.30	0.68		
21	7	FOUL RIFT RD	SMITH, JAMES W & KAREN L	74.69	85.19	Smith 1	91.67
21	7.02	FOUL RIFT ROAD	SMITH JAMES & KAREN	5.35	6.47		
59	1	121 HOPE CROSSING RD	THOMPSON, ROBERT & GLORIA	43.34	43.68	Thompson	51.21
68	54	668 CR 519	THOMPSON, ROBERT W & JOAN L	6.50	7.53		

Inventory Table 2. Target Farms that Meet the Eligibility Criteria within the ADA

Block	Lot	Location	Owner	Acres (Tax Data)	Acres (GIS Data)	Farm	Acres (GIS)
47	3	21 PEQUEST DR	UNANGST, OSCAR & LORRAINE	19.79	18.94	Unangst	160.71
32	9	466 CR 519	UNANGST, OSCAR & LORRAINE	3.70	3.32		
47.01	5	BRASS CASTLE RD	UNANGST, OSCAR	14.20	15.45		
47	1	CR 519 & PEQUEST DR	UNANGST, OSCAR	7.25	9.95		
32	10	470 CR 519	UNANGST, OSCAR	87.90	87.85		
48	1.01	489 CR 519	UNANGST, OSCAR & LORRAINE S	25.16	25.19		
30	8	257 CR 519	WHITETOWN REALTY	96.78	105.54	Whitetown	106.74
30	11	CR 519	WHITETOWN REALTY, LLC	0.98	1.20		
18	8	CR 519	WYCKOFF,JOHN C ETALS%M HAYCOCK	113.62	111.03	Wyckoff	280.64
18	9	248 CR 519	WYCKOFF,JOHN C &MORRIS,JUDY	120.61	122.80		
30	7	CR 519	WYCKOFF,JOHN C &JUDY MORRIS	45.80	46.81		
21	3	135 CR 620	VAN HORN, LISA	20.16	28.00	Van Horn	120.55
21	4	158 FOUL RIFT ROAD	VAN HORN, LISA	96.67	92.55		
				Total Eligible Farm Units within the ADA (21):			
				2,490.75			
<i>Farm Parcels that have not been identified as part of a Farm Unit</i>							
Block	Lot	Location	Owner	Acres (Tax Data)	Acres (GIS Data)		
49	3	BRASS CASTLE RD	BELBY, MICHAEL E & KATHRYNE A	5.15	7.05		
47	13	53 PEQUEST RD	BODOLSKY, THOMAS & JAYNE	15.97	14.98		
56	4	227 UPPER SAREPTA ROAD	BOHRER, WILLIAM	19.31	16.56		
62	3	569 CR 519	CAPRIO REAL ESTATE TRT%SUSAN YETTER	20.23	19.50		
64	8	RUTHERFORD DR	CRAMER, DAVID C & STEVEN L	43.60	42.51		
56	4.01	201 UPPER SAREPTA RD	GALATIANOS, GUS	32.46	36.26		
18	60	SUMMERFIELD RD	GLASS ANNA % DIANE GLASS	148.10	138.45		
11	9	MONTANA RD	JONES, MITCHELL	0.87	0.98		
16	23	BRASS CASTLE RD	MATTHEWS, TIMOTHY I & LYNDA	67.06	70.77		
33	20.01	372 HAZEN-OXFORD ROAD	MCCONNELL, EDWARD A & MARY	18.79	15.91		
59	11	120 SAREPTA RD	MCCREA, DAVID W & LETITIA M	15.41	17.54		
60	7	HOPE CROSSING RD	PENSACK, SHIRLEY A	5.20	5.98		
21	11	FOUL RIFT RD	POSTMA, JETSKE	35.86	37.40		
34	16	12 MILL RD	PWC INC	25.67	26.84		
55	8	OFF ROUTE 46	QUICK, JEFFREY	43.26	43.57		
33	16	HAZEN-OXFORD RD	RACE, SAMUEL R & JEAN A	12.00	13.11		

Inventory Table 2. Target Farms that Meet the Eligibility Criteria within the ADA

Block	Lot	Location	Owner	Acres (Tax Data)	Acres (GIS Data)		
67	4	216 UPPER SAREPTA RD	ROEDEL, JOYCE M	33.90	33.81		
7	14	123 CR 519	ROMANI MARGARET EST C/O HAYES, S.	70.80	70.87		
18	57	SUMMERFIELD RD	SALA,ROBERT P & JANET F	9.00	9.44		
30	2	68 CR 620	SMITH, EARL RICHARD	31.53	29.69		
30	1	2 OLD PHILLIPSBURG RD	SMITH, JAMES & KAREN	31.03	30.77		
30	5	CR 519	SMITH, JAMES W & KAREN	10.45	9.02		
67	5	183 SAREPTA RD	SMITH, RICKY	17.70	25.52		
56	1	243 UPPER SAREPTA RD	SPENCER, CRAIG & DOROTHEA	11.97	23.35		
18	7	196 CR 519	TISHUK, WILLIAM % LINDA STETTLER	131.96	133.77		
21	12	110-112 FOUL RIFT RD	VAN HORN, LISA	93.03	85.47		
54.01	2	1 SAREPTA RD	WADE, ROBERT E TRUSTEE	27.18	26.96		
67	22	24 DOE HOLLOW LA	ZHENG YUAN INTERNATIONAL FLAGSHIP S	149.22	158.73		
			Total Eligible Farm Parcels within the ADA (28):		1,144.80		
			Total Target Farm Parcels and Units within the ADA (49):		3,635.55		

Literature Cited

- ¹ New Jersey Division of Taxation, 2019 NJ Farmland Assessment. <https://www.state.nj.us/treasury/taxation/pdf/lpt/2019farmland.pdf>. Accessed February 2021.
- ² Eric K. Snyder and Associates, Inc. White Township Master Plan. June 14, 2004.
- ³ United States Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/>. Accessed January 2021.
- ⁴ United States Department of Agriculture, Natural Resources Conservation Service. Soil Data Access. <https://sdmdataaccess.nrcs.usda.gov/>. Accessed February 2021.
- ⁵ New Jersey Department of Agriculture, State Agriculture Development Committee. New Jersey Farmland Assessment. Warren County Summary.
- ⁶ Highlands Council Staff. Highlands Regional Master Plan 2008. https://www.nj.gov/njhighlands/master/rmp/final/highlands_rmp_112008.pdf. Accessed February 2021.
- ⁷ New Jersey Department of Agriculture, State Agriculture Development Committee. 2017 Warren County Agricultural Profile.
- ⁸ United States Department of Agriculture, National Agricultural Statistics Service. 2017 Census of Agriculture – County Data. New Jersey. County Summary Highlights. https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/st34_2_0001_0001.pdf. Accessed February 2021.
- ⁹ United States Department of Agriculture, National Agricultural Statistics Service. 2017 Census of Agriculture. Quick Stats. <http://quickstats.nass.usda.gov>. Accessed February 2021.
- ¹⁰ U.S. Department of Agriculture. Census of Agriculture. Data available online at: <https://www.nass.usda.gov/AgCensus/index.php>. Accessed March 2021.
- ¹¹ Census of Agriculture. 2017
- ¹² State Agricultural Advisory Committee. Warren County Farmland Assessment 2005-2017. Accessed March 2021.
- ¹³ Hackettstown Livestock Auction. About Us. <http://www.hackettstownauction.com/about-us.html>. Accessed March 2021.
- ¹⁴ State Agricultural Advisory Committee. Green Pages: An Agricultural Resource Guide. Accessed March 2021.
- ¹⁵ New Jersey State Development and Redevelopment Plan. March 2001. <https://nj.gov/state/planning/state-plan.shtml>. Accessed June 2020.

-
- ¹⁶ New Jersey Highlands Council. Highlands Regional Master Plan. Accessed December 2020
- ¹⁷ Highlands Sustainable Agriculture Technical Report. Accessed December 2020.
- ¹⁸ Township of White. 2020 Master Plan Re-Examination Report. Accessed September 2021.
- ¹⁹ Township of White and Town of Belvidere. Interim Wastewater Management Plan. Accessed February 2021.
- ²⁰ Warren County. 2017 Farmland Preservation Plan. Accessed February 2021.
- ²¹ NJ Department of Labor and Workforce Development. Population and Housing Estimates – 2019. https://nj.gov/labor/lpa/dmograph/est/est_index.html. Accessed December 2020.
- ²² NJ Department of Community Affairs. “Building Permits: Yearly Summary Data”. https://www.nj.gov/dca/divisions/codes/reporter/building_permits.html. Accessed February 2021.
- ²³ New Jersey Highlands Council. Highlands Development Credit (HDC) Registry. https://www.nj.gov/njhighlands/hdcbank/HDC_registry.pdf. Accessed June 2021.
- ²⁴ Personal Communication. Kathleen R. Reinalda. Township Clerk/CFRO/Registrar for White Township. June 3, 2021.
- ²⁵ Personal Communication. Kathleen R. Reinalda. Township Clerk/CFO/Registrar for White Township. September 2020.
- ²⁶ New Jersey Division of Taxation, 2019 Farmland assessment. <https://www.state.nj.us/treasury/taxation/pdf/lpt/2019farmland.pdf>. Accessed July 2020.
- ²⁷ Personal Communication with Robert Baumley, Deputy Executive Director, State Agriculture Development Committee, August 8, 2008.
- ²⁸ Personal Communication. Corey Tierney, Warren County Administrator. April 2021.
- ²⁹ Personal Communication. Steve Bruder. State Agriculture Development Committee. September 2020.
- ³⁰ New Jersey Department of Agriculture, State Agriculture Development Committee. Construction of Agricultural Labor Housing. <https://www.nj.gov/agriculture/sadc/farmpreserve/appraisals/Permitted%20Uses%20-%20Part%20IIB.pdf>. Accessed June 2020.
- ³¹ New Jersey Department of Agriculture, State Agriculture Development Committee. House Replacement Guidance Video. https://www.youtube.com/watch?v=tf2Cw_RICn8. Accessed June 2020.

-
- ³² State Agriculture Development Committee, New Jersey Farmland Preservation Program Appraiser Handbook. June 22, 2017.
<https://www.nj.gov/agriculture/sadc/farmpreserve/appraisals/2017%20Handbook%20as%20adopted%206-22-17%20meeting.pdf>. Accessed June 2020.
- ³³ Ibid.
- ³⁴ Ibid.
- ³⁵ Warren County Land Preservation Department.
<http://www.co.warren.nj.us/Land%20Preservation%20Dept/index.html>. Accessed May 2021.
- ³⁶ New Jersey Division of Taxation, 2019 Farmland Assessment.
<https://www.state.nj.us/treasury/taxation/pdf/lpt/2019farmland.pdf>. Accessed July 2020.
- ³⁷ Personal Communication with Corey Tierney, Warren County Board of Recreation Commissioners. December 11, 2020.
- ³⁸ New Jersey Department of Agriculture. Agricultural Smart Growth Tool Kit “Planning for Agriculture”. <http://www.state.nj.us/agriculture/toolkit.htm>. Accessed May 18, 2020.
- ³⁹ New Jersey Department of Agriculture, 2006 Agricultural Smart Growth Plan.
<https://www.state.nj.us/agriculture/smartgrowthplan.pdf>. Accessed May 18, 2020.
- ⁴⁰ Warren County. Warren County Agriculture Development Board.
<http://www.co.warren.nj.us/Land%20Preservation%20Dept/CADB.html>. Accessed May 18, 2020.
- ⁴¹ New Jersey Department of Agriculture. 2011 Economic Development Strategies.
<http://www.nj.gov/agriculture/pdf/11EcoDevStrategies.pdf>. Accessed May 18, 2020.
- ⁴² New Jersey Farmland Assessment. Warren County Data. Received from Steven Bruder, SADC. March, 2020.
- ⁴³ Jersey Fresh. Retail Partners. <https://findjerseyfresh.com/find/partners/>. Accessed March 26, 2020.
- ⁴⁴ Jersey Fresh. Find Jersey Fresh. <https://findjerseyfresh.com/explore/#findfresh>. Accessed March 26, 2020.
- ⁴⁵ Jersey Fresh. Community Supported Garden at Genesis Farm.
<https://findjerseyfresh.com/go/community-supported-garden-at-genesis-farm/>. Accessed March 26, 2020.
- ⁴⁶ Rutgers New Jersey Agricultural Experiment Station. Agritourism in New Jersey.
<https://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/>. Accessed March 26, 2020

-
- ⁴⁷ New Jersey Skylands. Agritourism in Warren County. <http://www.njskylands.com/fmwarren>. Accessed March 26, 2020.
- ⁴⁸ Natural Jersey. New Jersey Farms and Farm Stands. [http://www.naturaljersey.com/farms-open-to-the-publicfarm-standspick-your-own.html#/.](http://www.naturaljersey.com/farms-open-to-the-publicfarm-standspick-your-own.html#/) Accessed March 26, 2020.
- ⁴⁹ Tour de Farm New Jersey. <http://www.tourdefarmnj.com/>. Accessed March 26, 2020.
- ⁵⁰ Warren County Farmers Fair. <http://www.warrencountymfarmersfair.org/>. Accessed March 26, 2020.
- ⁵¹ GrowNYC. Greenmarket Farmers Markets. <https://www.grownyc.org/greenmarket>. Accessed March 26, 2020.
- ⁵² Rutgers New Jersey Agricultural Experiment Station. Ultra-niche Crops. <https://njaes.rutgers.edu/ultra-niche-crops/>. Accessed March 26, 2020.
- ⁵³ Rutgers New Jersey Agricultural Experiment Station. Growing Alternative Vegetables and Herb Crops from around the World. <https://sustainable-farming.rutgers.edu/alternative-world-crops/>. Accessed March 26, 2020.
- ⁵⁴ United States Department of Agriculture National Agricultural Statistic Service. 2017 Census of Agriculture. https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/st34_2_0002_0002.pdf. Accessed March 30, 2020.
- ⁵⁵ New Jersey Department of Agriculture. List of Currently Certified Nurseries and Dealers. <https://www.nj.gov/agriculture/divisions/pi/pdf/NurseryAndDealerDirectory.pdf>. Accessed March 30, 2020.
- ⁵⁶ Jersey Grown. Garden Centers and Nurseries Search Results. <https://www.nj.gov/cgi-bin/agriculture/jerseygrown/gcnsearch.pl?county1=warren>. Accessed March 30, 2020.
- ⁵⁷ Rutgers New Jersey Agricultural Experiment Station. Sustainable Farming on the Urban Fringe. Growing Alternative Vegetable and Herb Crops from Around the World. <https://sustainable-farming.rutgers.edu/alternative-world-crops/>. Accessed April 13, 2020.
- ⁵⁸ New Jersey State Assembly, 2020-2021 Session. Assembly Bill A585. <https://legiscan.com/NJ/bill/A585/2020>. Accessed April 15, 2020.
- ⁵⁹ Warren County. Grown In Warren, A Strategic Growth and Planning Report. Accessed March 2020.
- ⁶⁰ Certified Naturally Organic. Caristi Farms. <https://certified.naturallygrown.org/producers/2478>. Accessed April 16, 2020,
- ⁶¹ United States Department of Agriculture. Agricultural Marketing Service. Do I Need To Be Certified Organic?

<https://www.ams.usda.gov/sites/default/files/media/DoINeedTobeCertifiedOrganicFactSheet.pdf>. Accessed April 16, 2020.

⁶² New Jersey Department of Agriculture. New Jersey Equine Advisory Board. Directory of Facilities. 2020. <https://www.jerseyequine.nj.gov/equinefacilities.pdf>. Accessed April 20, 2020.

⁶³ New Jersey Department of the Treasury. Out-of-State Winery License for Direct Ship Wine Sales to New Jersey. <http://www.state.nj.us/treasury/taxation/os-wine-sales.shtml>. Accessed May 18, 2020.

⁶⁴ New Jersey Department of Agriculture. News From the NJDA. July 2014, Volume 2, Issue 4. <http://www.nj.gov/agriculture/pdf/njdanewsletter1407.pdf>. Accessed May 18, 2020.

⁶⁵ LegiScan. New Jersey Assembly Bill 2773. <https://legiscan.com/NJ/bill/A2773/2020>. Accessed May 18, 2020.

⁶⁶ New Jersey Department of Environmental Protection. Spatial Analysis of Wine-Grape Growing in the Warren Hills American Viticultural Area of New Jersey. <http://www.state.nj.us/dep/njgs/pricelst/ofmap/ofm83.pdf>. 2011. Accessed May 18, 2020.

⁶⁷ New Jersey Department of Agriculture. Tourist Oriented Destination Signage (TODS). <http://www.nj.gov/agriculture/home/farmers/todsagritourism.html>. Accessed April 20, 2020.

⁶⁸ Rutgers New Jersey Agricultural Experiment Station. <https://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/>. Accessed April 20, 2020.

⁶⁹ New Jersey Department of Agriculture. State Agriculture Development Committee. Rule Proposals. <http://www.nj.gov/agriculture/sadc/ruleprop/>. Accessed April 20, 2020.

⁷⁰ USDA 2012 Census of Agriculture. Appendix B. https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/njappxb.pdf. Accessed April 20, 2020.

⁷¹ Agritourism Industry Development in New Jersey. Brian J. Schilling. Rutgers. http://www.dvrpc.org/food/pdf/Schilling_AgTourism_2008.pdf. Accessed April 21, 2020.

⁷² New Jersey Department of Agriculture, Jersey Fresh website. <https://findjerseyfresh.com/> Accessed April 21, 2020.

⁷³ Rutgers University of New Jersey Agricultural Experiment Station. Extension Training for Agritourism Development. <http://agritourism.rutgers.edu/training/>. Accessed April 21, 2020.

⁷⁴ New Jersey Department of Agriculture. Jersey Equine. Calendar of Events. <https://www.jerseyequine.nj.gov/equinecal.htm>. Accessed April 21, 2020.

⁷⁵ New Jersey Department of Agriculture. Jersey Equine. Directory of Facilities. <https://www.jerseyequine.nj.gov/equinefacilities.pdf>. Accessed April 21, 2020.

-
- ⁷⁶ Visit NJ Farms! <http://www.visitnjfarms.org/>. Accessed April 21, 2020.
- ⁷⁷ Official Tourism Website of New Jersey. Wineries and Vineyards in New Jersey. <https://www.visitnj.org/nj/outdoors-sport-recreation/farms-orchards>. Accessed April 21, 2020.
- ⁷⁸ Official Tourism Website of New Jersey. Wineries and Vineyards in New Jersey. <https://www.visitnj.org/nj/attractions/wineries-vineyards>. Accessed April 21, 2020.
- ⁷⁹ Official Tourism Website of New Jersey. Wineries and Vineyards in New Jersey. <https://www.visitnj.org/nj/events/fairs>. Accessed April 21, 2020.
- ⁸⁰ New Jersey Skylands. Attractions. <http://www.njskylands.com/dirshop>. Accessed April 21, 2020.
- ⁸¹ Warren County. Tourism. <http://www.co.warren.nj.us/visitwarren.html>. Accessed April 21, 2020.
- ⁸² Explore Warren. Farms, Farm Markets, and Pick-Your-Own. <http://www.explorewarren.org/categories/farms>. Accessed April 21, 2020.
- ⁸³ New Jersey Farmers Direct Marketing Association, Inc. Farm Directory. <http://www.njfdma.org/farm-directory.html>. Accessed April 21, 2020.
- ⁸⁴ New Jersey Christmas Tree Growers' Association. <https://njchristmastrees.org/find-a-farm/warren-county/>. Accessed April 21, 2020.
- ⁸⁵ The Farm Institute. About. <http://www.thetrustees.org/places-to-visit/cape-cod-islands/the-farm-institute.html>. Accessed April 21, 2020.
- ⁸⁶ New Jersey Department of Agriculture. Marketing and Development. <http://www.state.nj.us/agriculture/divisions/md/prog/wic.html>. Accessed April 21, 2020.
- ⁸⁷ Rutgers. Sustainable Farming on the Urban Fringe. Agritourism in New Jersey. <http://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/>. Accessed April 21, 2020.
- ⁸⁸ Rutgers New Jersey Agricultural Experiment Station Cooperative Extension. Budgeting for a Corn Maze. <https://njaes.rutgers.edu/e343/>. Accessed April 21, 2020.
- ⁸⁹ Warren County. Grown In Warren, A Strategic Growth and Planning Report. 2019. <https://growninwarren.org/>. Accessed April 2020.
- ⁹⁰ Ibid.
- ⁹¹ Ibid.
- ⁹² New Jersey Department of Labor and Workforce Development. New Jersey's Minimum Wage Postcard. https://www.nj.gov/labor/forms_pdfs/wagehour/minimumwage_postcard.pdf. Accessed May 11, 2020.

-
- ⁹³ New York State Department of Labor. Minimum Wage. <https://labor.ny.gov/workerprotection/laborstandards/workprot/minwage.shtm>. Accessed May 11, 2020.
- ⁹⁴ New Jersey Department of Agriculture, Agricultural Economic Development Services. <https://www.nj.gov/agriculture/divisions/md/prog/agricultureeconomic.html#top>. Accessed May 12, 2020.
- ⁹⁵ New Jersey Department of Agriculture. Farm Link. <https://www.nj.gov/agriculture/sadc/farmlink/>. Accessed April 30, 2020.
- ⁹⁶ New Jersey State Agriculture Development Committee. Annual Report For FY2018. <https://www.nj.gov/agriculture/sadc/publications/fy2018AnnualReportFinalWeb.pdf>. Accessed May 18, 2020.
- ⁹⁷ New Jersey Department of Agriculture State Agricultural Development Committee. Farm Transfer, Succession, and Retirement Planning. <https://www.nj.gov/agriculture/sadc/farmlink/resources/farmtransition.html>. Accessed May 18, 2020.
- ⁹⁸ California Farm Link. Farm Succession Guidebook. <https://www.californiafarmlink.org/resources/farm-succession-guidebook/>. Accessed May 18, 2020.
- ⁹⁹ New Jersey Department of Agriculture. State Agriculture Development Committee. New Jersey Farmland Leasing Guidebook. <https://www.nj.gov/agriculture/sadc/farmlink/resources/leaseguide.pdf>. Accessed April 30, 2020.
- ¹⁰⁰ New Jersey Department of Agriculture. State Agriculture Development Committee. Project to Enhance Leasing and Linking Resources. <http://www.nj.gov/agriculture/sadc/farmlink/resources/leasingproject.html>. Accessed April 30, 2020.
- ¹⁰¹ New Jersey Department of Agriculture. State Agriculture Development Committee. Agricultural Mediation Program. Agricultural Mediation Program Handbook. <http://www.nj.gov/agriculture/sadc/agmediation/handbook.pdf>. Accessed April 30, 2020.
- ¹⁰² New Jersey Agricultural Society. New Jersey Agricultural Leadership Development Program (NJALDP). <http://www.njagsociety.org/nj-agricultural-leadership-development-program.html>. Accessed April 30, 2020.
- ¹⁰³ Rutgers New Jersey Agricultural Experiment Station. Grow Healthy. <http://growhealthy.rutgers.edu/>. Accessed May 11, 2020.
- ¹⁰⁴ New Jersey State Horticultural Society. <http://www.horticulturalnews.org/advertising.pdf>. Accessed May 12, 2020.

-
- ¹⁰⁵ Community Involved in Sustaining Agriculture. Resources for Farmers. Tipsheets and Resources. <http://www.buylocalfood.org/resources-for-farmers/tipsheets/>. Accessed May 12, 2020.
- ¹⁰⁶ New Jersey Department of Agriculture, Marketing and Development. Jersey Fresh. <http://www.nj.gov/agriculture/divisions/md/prog/jerseyfresh.html>. Accessed May 12, 2020.
- ¹⁰⁷ United States Department of Agriculture, National Agricultural Library, Alternative Farming Systems Information Center, Community Supported Agriculture. <http://www.nal.usda.gov/afsic/pubs/csa/csa.shtml>. Accessed May 18, 2020.
- ¹⁰⁸ Foodshed Alliance. Home Page. <http://www.foodshedalliance.org/>
- ¹⁰⁹ Rutgers University School of Environmental and Biological Sciences. <https://sebs.rutgers.edu/>. Accessed May 18, 2020.
- ¹¹⁰ Personal communication with Hank Bignell, Agriculture & Natural Resource Senior Program Coordinator. NJAES-RCE Warren County. March 2021.
- ¹¹¹ Ibid.
- ¹¹² Hackettstown Livestock Auction. About Our Auction. <http://www.hackettstownauction.com/about-us.html>. Accessed May 11, 2020.
- ¹¹³ Personal communication with Hank Bignell, Agriculture & Natural Resource Senior Program Coordinator. NJAES-RCE Warren County. March 2021.
- ¹¹⁴ New Jersey Agricultural Convention. 2020 Resolution #1 Hemp. <https://www.nj.gov/agriculture/conventions/2020/2020%20Resolution%20%201%20-%20Hemp%20FINAL%20FOR%20WEB.pdf>. Accessed May 19, 2020.
- ¹¹⁵ Personal communication with Hank Bignell, Agriculture & Natural Resource Senior Program Coordinator. NJAES-RCE Warren County. March 2021.
- ¹¹⁶ Foodshed Alliance. Food Hub Feasibility Study For Northern New Jersey. <http://foodshedalliance.org/wp-content/uploads/2018/09/Food-Hub-Report-FINAL.pdf>. Accessed May 18, 2020.
- ¹¹⁷ N.J.A.C. 7:13 Flood Hazard Area Control Act Rules. Amended February 2, 2015. http://www.nj.gov/dep/rules/rules/njac7_13.pdf. Accessed December 8, 2020.
- ¹¹⁸ Warren County Economic Development Committee. About Us. <http://warrencdev.com/about-us>. Accessed May 14, 2020.
- ¹¹⁹ US Department of Agriculture. Grants and Loans. <https://www.usda.gov/topics/farming/grants-and-loans>. Accessed May 18, 2020.

-
- ¹²⁰ New Jersey Department of Agriculture, Sustainable Agriculture Research and Education (SARE). <https://www.nj.gov/agriculture/grants/sare.html>. Accessed May 12, 2020.
- ¹²¹ New Jersey Department of Agriculture. 2020 Specialty Crop Block Grants. <https://www.nj.gov/agriculture/grants/>. Accessed May 18, 2020.
- ¹²² New Jersey Department of Agriculture State Agriculture Development Committee. Farmland Preservation Programs. <https://www.nj.gov/agriculture/sadc/farmpreserve/programs/>. Accessed May 18, 2020.
- ¹²³ New Jersey Farm Bureau. <https://njfb.org/>. Accessed May 14, 2020.
- ¹²⁴ United States Department of Agriculture, Natural Resources Conservation Service, Information for Farmers. <http://www.nj.nrcs.usda.gov/farmers.html>. Accessed May 2020.
- ¹²⁵ United States Department of Agriculture, Natural Resources Conservation Service New Jersey. <http://www.nj.nrcs.usda.gov/contact/index.html#Hackettstown>. Accessed May 2020.
- ¹²⁶ Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. July 2020.
- ¹²⁷ New Jersey NRCS Technical Resources. Electronic Field Office Technical Guide (eFOTG). <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg/>. Accessed May 2020.
- ¹²⁸ USDA Announces Updated Conservation Practice Standards <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/releases/?cid=NRCSEPRD1692218>. Accessed November 2020.
- ¹²⁹ New Jersey Department of Agriculture, Agricultural and Natural Resources. <https://www.nj.gov/agriculture/divisions/anr/nrc/>. Accessed May 2020.
- ¹³⁰ Upper Delaware Soil Conservation District, Home Page. <https://www.upperdelawarescd-nj.com/>. Accessed August 2021.
- ¹³¹ Cooperative Extension of Warren County. Rutgers New Jersey Agricultural Experiment Station. <https://warren.njaes.rutgers.edu/ag/>. Accessed May 2020.
- ¹³² Ibid.
- ¹³³ New Jersey Department of Environmental Protection, Division of Parks and Forestry, Private Lands Management Program. http://www.nj.gov/dep/parksandforests/forest/njfs_private_lands_mgt.html. Accessed May 2020.
- ¹³⁴ New Jersey Department of Environmental Protection, NJ Forest Service. New Jersey Farmland Assessment. https://www.state.nj.us/dep/parksandforests/forest/njfs_farm_assess.html. Accessed May 2020.

-
- ¹³⁵ New Jersey Treasury, Division of Taxation, N.J.A.C. 18:15-2.7.
<https://www.state.nj.us/treasury/taxation/pdf/lpt/regs/reg1815.pdf>. Accessed July 2020.
- ¹³⁶ New Jersey Department of Environmental Protection, Division of Parks and Forestry, State Approved Foresters List. <https://www.state.nj.us/dep/parksandforests/forest/ACF.pdf>. Accessed July 2020.
- ¹³⁷ New Jersey Division of Taxation, Farmland Assessment,
<https://www.state.nj.us/treasury/taxation/pdf/lpt/2019farmland.pdf>. Accessed July 2020.
- ¹³⁸ Ibid.
- ¹³⁹ New Jersey Department of Environmental Protection, Division of Fish and Wildlife.
https://www.state.nj.us/dep/fgw/habitat_mgt.htm. Accessed May 2020.
- ¹⁴⁰ Personal Communication with Michael Hart, Regional Forester, New Jersey Forest Service, July 2020.
- ¹⁴¹ New Jersey Department of Environmental Protection, Division of Parks and Forestry. NJ Forest Stewardship Program. http://www.njparksandforests.org/forest/stw_inc_prog.html. Accessed May 2020.
- ¹⁴² Personal Communication with Michael Hart, Regional Forester, New Jersey Forest Service, June 2020. Due to the COVID-19 Pandemic, updated numbers were not accessible for individual municipalities in Warren County.
- ¹⁴³ Personal Communication with Michael Hart, Regional Forester, New Jersey Forest Service, November 2020.
- ¹⁴⁴ New Jersey Department of Environmental Protection, NJ Forest Service.
https://www.state.nj.us/dep/parksandforests/forest/njfs_regional_offices.html. Accessed May 2020.
- ¹⁴⁵ River Friendly Farm. <https://www.riverfriendlyfarm.org/>. Accessed May 2020.
- ¹⁴⁶ New Jersey Department of Agriculture, Soil and Water Conservation Grants.
<https://www.nj.gov/agriculture/sadc/farmpreserve/grants/>. Accessed May 2020.
- ¹⁴⁷ New Jersey State Agricultural Development Committee, Farmland Stewardship Deer Fencing Grants. <https://www.nj.gov/agriculture/sadc/publications/deerfencinggrants.pdf>. Accessed June 2020.
- ¹⁴⁸ United States Department of Agriculture, Conservation Programs Offered In New Jersey, Programs Available in 2020. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/>. Accessed May 2020.
- ¹⁴⁹ United States Department of Agriculture, Farm Service Agency, 2018 Farm Bill.
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/farmbill/>. Accessed May 2020.

-
- ¹⁵⁰ United States Department of Agriculture, Economic Research Service.
<https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/crop-commodity-program-provisions-title-i/>. Accessed May 2020.
- ¹⁵¹ United States Department of Agriculture, Economic Research Service.
<https://www.ers.usda.gov/agriculture-improvement-act-of-2018-highlights-and-implications/crop-commodity-programs/>. Accessed May 2020.
- ¹⁵² United States Department of Agriculture, Economic Research Service.
<https://www.ers.usda.gov/agriculture-improvement-act-of-2018-highlights-and-implications/conservation/>. Accessed May 2020.
- ¹⁵³ United States Department of Agriculture, Farm Service Agency.
<https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index>. Accessed May 2020.
- ¹⁵⁴ State of New Jersey, Department of Agriculture.
<https://www.nj.gov/agriculture/divisions/anr/agriassist/crep.html>. Accessed May 2020.
- ¹⁵⁵ United States Department of Agriculture, NJNRCS.
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/financial/equip/>. Accessed May 2020.
- ¹⁵⁶ Ibid.
- ¹⁵⁷ Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. July 2020.
- ¹⁵⁸ United States Department of Agriculture, NJNRCS.
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/cig/?cid=nrcs141p2_018671#2018. Accessed March 2021.
- ¹⁵⁹ United States Department of Agriculture, NJNRCS.
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/financial/csp/>. Accessed May 2020.
- ¹⁶⁰ United States Department of Agriculture, NJNRCS.
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/equip/?cid=nrcs141p2_018990. Accessed May 2020.
- ¹⁶¹ United States Department of Agriculture, NRCS.
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/acep/>. Accessed May 2020.
- ¹⁶² United States Department of Agriculture, NRCS. News Release. Updates to Conservation Easements Strengthens Protection for Farmlands, Grasslands, and Wetlands.
<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/newsroom/releases/?cid=NRCSEPRD1738421>. Accessed February 2021.

-
- ¹⁶³ United States Department of Agriculture, NRCS, <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/>. Accessed July 2020.
- ¹⁶⁴ United States Department of Agriculture, NRCS. <https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/programs/financial/rcpp/?cid=nrcseprd1459034>. Accessed May 2020.
- ¹⁶⁵ Warren County Planning Department, Warren County Strategic Growth Plan. October 2005. http://www.co.warren.nj.us/planning/county_strategic_growth_plan.html. Accessed June 2020.
- ¹⁶⁶ Warren County Planning Department. Warren County Open Space Plan, 2018. http://www.co.warren.nj.us/planning/open_space_plan2018.html. Accessed March 2021.
- ¹⁶⁷ SADC. New Jersey Farmland Assessments. Warren County municipal data. Received March 2020.
- ¹⁶⁸ University of Nebraska-Lincoln, United States Drought Monitor. <https://droughtmonitor.unl.edu/Data/Timeseries.aspx>. Accessed July 2020.
- ¹⁶⁹ NJ Highlands Council. Highlands Regional Master Plan. http://www.highlands.state.nj.us/njhighlands/master/rmp/final/highlands_rmp_112008.pdf. November 2008. Accessed June 2020.
- ¹⁷⁰ Office of the New Jersey State Climatologist at Rutgers University. NJ Weather & Climate Network. <http://njweather.org/>. Accessed May 2020.
- ¹⁷¹ USDA, Soil Conservation Service. Agricultural Waste Management Systems. <https://www.wcc.nrcs.usda.gov/ftpref/wntsc/AWM/handbook/ch9.pdf>. Accessed July 2020.
- ¹⁷² New Jersey Treasury, Division of Taxation, <https://www.state.nj.us/treasury/taxation/lpt/farmland.shtml>. Accessed July 2020.
- ¹⁷³ Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. April 2021.
- ¹⁷⁴ New Jersey Department of Agriculture. Animal Waste Management. <https://www.nj.gov/agriculture/divisions/anr/pdf/animalwastemanagementrule.pdf>. Accessed May 2020.
- ¹⁷⁵ New Jersey Department of Agriculture. Animal Waste Management. <https://www.nj.gov/agriculture/divisions/anr/agriassist/animalwaste.html>. Accessed July 2020.
- ¹⁷⁶ Criteria and Standards for Animal Waste Management (N.J.A.C. 2:91). <http://state.nj.us/agriculture/divisions/anr/pdf/animalwastemanagementrule.pdf>. Accessed May 2020.

¹⁷⁷ Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. April 2021.

¹⁷⁸ Warren County Recycling Center. <http://pcfawc.com/recycling/>. Accessed March 2021.

¹⁷⁹ Recycling Center of North Jersey. <https://balbienterprises.com/recycling-center>. Accessed March 2021.

¹⁸⁰ Warren County District Landfill. <http://www.pcfawc.com/landfill3.htm>. Accessed March 2021.

¹⁸¹ Pollution Control Financing Authority of Warren County. Tire Amnesty Day. <http://www.pcfawc.com/flyers/farmer%20tire%20amnesty%20day%20flyer.pdf>. Accessed May 2020.

¹⁸² New Jersey Department of Agriculture. Division of Marketing and Development. Programs and Services. Recycling. <https://www.nj.gov/agriculture/divisions/anr/nrc/recycling.html>. Accessed June 2020.

¹⁸³ NJDEP, Air Quality, Energy & Sustainability. <https://www.state.nj.us/dep/aqes/rggi.html>, Accessed July 2020.

¹⁸⁴ P.L.2009 Chapter 13. An Act concerning agriculture and biomass, solar, and wind energy, supplementing P.L.1983, c.32 and amending and supplementing P.L.1983, c.31 and P.L.1964, c.48. <http://www.nj.gov/agriculture/sadc/news/hottopics/solar%20wind%20biomass%20pamphlet%20law.pdf>. Accessed June 2020.

¹⁸⁵ State of New Jersey, Energy Master Plan. <https://www.nj.gov/emp/energy/>. Accessed May 2020.

¹⁸⁶ U.S. Department of Agriculture, Rural Development. <https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency>. Accessed May 2020.

¹⁸⁷ United States Department of Agriculture, Natural Resources Conservation Service of New Jersey. https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/equip/?cid=nrcs141p2_018755. Accessed June 2020.

¹⁸⁸ Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. April 2021.

¹⁸⁹ State Agriculture Development Committee. Subchapter 24 in Chapter 71, Solar Energy Generation on Preserved Farms

<https://www.nj.gov/agriculture/sadc/ruleprop/SUBCHAPTER%2024%20unofficial%20copy%20solar.pdf>. Accessed October 2020.

-
- ¹⁹⁰ State Agriculture Development Committee. AMPs for Construction, Installation, Operation and Maintenance of Solar Energy Generation Facilities, Structures and Equipment on Commercial Farms.
<https://www.nj.gov/agriculture/sadc/rtfprogram/amps/adoptedamps/solar.html>. Accessed October 2020.
- ¹⁹¹ Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. July 2020.
- ¹⁹² New Jersey's Clean Energy Program. <https://www.njcleanenergy.com/renewable-energy/technologies/wind/wind>. Accessed June 2020.
- ¹⁹³ New Jersey's Clean Energy Program. Anemometer Loan Program.
<http://www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/anemometer-loan-program>. Accessed May 2020.
- ¹⁹⁴ New Jersey Board of Public Utilities, NJCEP Combined Heat & Power – Fuel Cell (CHP-FC) Program. https://www.njcleanenergy.com/files/file/FY20%20Program%20Guide_CHP-FC%20Final.pdf. Accessed June 2020.
- ¹⁹⁵ Renewableenergyworld.com. Measuring the Potential of Switchgrass Pellets. April 2013.
<https://www.renewableenergyworld.com/2013/04/01/measuring-the-potential-of-switchgrass-pellets/>. Accessed June 2020.
- ¹⁹⁶ BioDiesel. <https://www.biodiesel.org/using-biodiesel/finding-biodiesel/retail-locations/retail-map>. Accessed June 2020.
- ¹⁹⁷ Ibid.
- ¹⁹⁸ New Jersey Clean Energy Program. Renewable Energy Incentive Program.
<https://www.njcleanenergy.com/renewable-energy/programs/renewable-energy-incentive-program>. Accessed June 2020.
- ¹⁹⁹ New Jersey Clean Energy Program. SREC Registration Program.
<https://www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy-certificates-srec/new-jersey-solar-renewable-energy>. Accessed June 2020.
- ²⁰⁰ New Jersey Clean Energy Program. Anemometer Loan Program.
<https://www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/anemometer-loan-program>. Accessed June 2020.
- ²⁰¹ New Jersey Clean Energy Program. SmartStart Buildings Program Guide modified 02/02/2021.
<https://www.njcleanenergy.com/files/file/NJSSB/FY21/FY21%20SmartStart%20Buildings%20Program%20Guide%2001%20-%20Ready%20to%20post.pdf>. Accessed March 2021.

-
- ²⁰² United States Department of Agriculture, Rural Development.
<https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency>. Accessed June 2020.
- ²⁰³ United States Department of Agriculture, Rural Development.
https://www.rd.usda.gov/sites/default/files/fact-sheet/508_RD_FS_RBS_AdvancedBioFuel.pdf. Accessed June 2020.
- ²⁰⁴ United States Department of Agriculture, Rural Development.
<https://www.rd.usda.gov/programs-services/biorefinery-renewable-chemical-and-biobased-product-manufacturing-assistance>. Accessed June 2020.
- ²⁰⁵ New Jersey Department of Agriculture, State Agriculture Development Committee.
<https://www.nj.gov/agriculture/sadc/rtfprogram/>. Accessed June 2020.
- ²⁰⁶ New Jersey Department of Agriculture, State Agriculture Development Committee, Right to Farm (RTF) Program: Eligibility Criteria for RTF Act Protection.
<https://www.nj.gov/agriculture/sadc/rtfprogram/eligibility/>. Accessed June 2020.
- ²⁰⁷ New Jersey Department of Agriculture, State Agricultural Development Committee.
<https://www.nj.gov/agriculture/sadc/rtfprogram/amps/adoptedamps/index.html>. Accessed June 2020.
- ²⁰⁸ New Jersey Department of Agriculture, State Agriculture Development Committee, Formal Conflict Resolution Process.
<https://www.nj.gov/agriculture/sadc/rtfprogram/conflictres/formal/index.html>. Accessed June 2020.
- ²⁰⁹ SADC Model Ordinance.
<https://www.nj.gov/agriculture/sadc/rtfprogram/resources/modelrtfordinance.pdf>. Accessed January 2021.
- ²¹⁰ New Jersey Department of Agriculture, New Jersey's Farmland Assessment Overview.
<https://www.nj.gov/agriculture/divisions/anr/pdf/farmlandassessmentoverview.pdf>. Accessed June 2020.
- ²¹¹ NJ Division of Taxation Farmland Data Reports. Numbers from 2009 and 2019.
<https://www.state.nj.us/treasury/taxation/lpt/farmland.shtml>. Accessed January 2021.
- ²¹² New Jersey Department of Agriculture, Agricultural Smart Growth Plan 2006.
<http://www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf> Accessed June 2020.
- ²¹³ New Jersey Farm Bureau. An Overview of Motor Vehicle Statutes & Regulations Impacting New Jersey Farmers. December 2010. <https://njfb.org/wp-content/uploads/2013/07/MotorVehicleBook.pdf>. Accessed June 2020.
- ²¹⁴ Personal communication with Kent Hardmeyer, United States Department of Agriculture, Natural Resources Conservation Service. May 15, 2007 and August 2008.

-
- ²¹⁵ New Jersey Department of Labor and Workforce Development. https://www.nj.gov/labor/wagehour/content/childlabor_RateofPay.html. Accessed June 2020.
- ²¹⁶ Personal communication. Marianne Van Deursen, Vice President of Academics at Warren County Community College. February 2021.
- ²¹⁷ Northeast Organic Farming Association – New Jersey. <https://nofanj.org/>. Accessed June 2020.
- ²¹⁸ Salem County NJAES. <https://salem.njaes.rutgers.edu/contact.html>. Accessed June 2020.
- ²¹⁹ New Jersey Department of Agriculture. Training. <https://www.nj.gov/agriculture/grants/training.html>. Accessed June 2020.
- ²²⁰ New Jersey Department of Agriculture. Food, Agriculture, & Natural Resources Education. https://www.jerseyageducation.nj.gov/agriculture/ag_ed/. Accessed June 2020.
- ²²¹ New Jersey Farm Bureau. Information for Farmers. <https://njfb.org/issues-policies/information-for-farmers/>. Accessed June 2020.
- ²²² United States Department of Agriculture. National Agricultural Statistics Service. Quick Stats. <https://quickstats.nass.usda.gov/>. Accessed June 2020.
- ²²³ Ibid.
- ²²⁴ United States Department of Agriculture. 2017 Census of Agriculture County Profile. https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/New_Jersey/cp34041.pdf. Accessed June 2020.
- ²²⁵ Centenary University. University Catalog 2019-2020. <https://s18945.pcdn.co/wp-content/uploads/2019/09/Catalog-2019-2020-final1.0.pdf>. Accessed June 2020.
- ²²⁶ New Jersey Department of Agriculture. Directory of NJ Ag Food and Natural Resources Education Programs and Related Organizations. https://www.jerseyageducation.nj.gov/agriculture/ag_ed/bulletin/ageddirectory.html#5. Accessed June 2020.
- ²²⁷ New Jersey Office of the Secretary of Higher Education. <https://www.nj.gov/highereducation/ccog.shtml>. Accessed January 2021.
- ²²⁸ New Jersey Department of Agriculture. Agricultural Education. New Jersey FFA Association. http://www.state.nj.us/agriculture/ag_ed/ffa/. Accessed May 14, 2020.
- ²²⁹ National Future Farmers of America Organization. Our Membership. <https://www.ffa.org/our-membership/>. Accessed June 2020.
- ²³⁰ State of New Jersey Department of Agriculture. Agricultural Education. FFA Convention. http://www.nj.gov/agriculture/ag_ed/ffa/convention/ Accessed June 2020.

-
- ²³¹ New Jersey Department of Agriculture. Directory of NJ Ag Food and Natural Resources Education Programs and Related Organizations. https://www.jerseyageducation.nj.gov/agriculture/ag_ed/bulletin/ageddirectory.html#6. Accessed June 2020.
- ²³² Personal communication with Jennifeur Wilson, FFA Advisor, North Warren Regional School District. September 2009.
- ²³³ Rutgers New Jersey Agricultural Extension Station. 4-H Development. <https://warren.njaes.rutgers.edu/4h/>. Accessed June 2020.
- ²³⁴ Warren County 4-H Program. <http://warren4-h.org/>. Accessed May 14, 2020.
- ²³⁵ New Jersey Department of Agriculture. Farm Link. <https://www.nj.gov/agriculture/sadc/farmlink/>. Accessed June 2020.
- ²³⁶ NJ Land Link. <https://www.njlandlink.org/>. Accessed June 2020.
- ²³⁷ Rutgers New Jersey Agricultural Experiment Station. Perimeter Planning for Pest Management. <https://njaes.rutgers.edu/organic/perimeter-planting.php>. Accessed June 2020.
- ²³⁸ Rutgers: New Jersey Agricultural Experiment Station. Spotted Lanternfly. <https://njaes.rutgers.edu/spotted-lanternfly/#:~:text=In%20the%20USA%2C%20spotted%20lanternfly,Jersey%20crops%20and%20hardwood%20trees.&text=New%20Jersey%20populations%20were%20first,the%20state's%20border%20with%20Pennsylvania>. Accessed March 2021.
- ²³⁹ New Jersey Department of Agriculture, Division of Plant Industry, Programs. <http://www.state.nj.us/agriculture/divisions/pi/prog/>. Accessed June 2020.
- ²⁴⁰ New Jersey Department of Agriculture. New Jersey Gypsy Moth Aerial Defoliation Survey, 2017. <https://www.nj.gov/agriculture/divisions/pi/pdf/2017%20NJ%20GM%20Aerial%20Defoliation%20Survey.pdf>. Accessed January 2021.
- ²⁴¹ 2018 Farm Bill Primer: Rural Development Programs. <https://crsreports.congress.gov/product/pdf/IF/IF11225>. Accessed June 2020.
- ²⁴² United States Department of Agriculture, Rural Development. <https://www.rd.usda.gov/>. Accessed June 2020.
- ²⁴³ Census Reporter. White Township, Warren County, NJ. 2019. <https://censusreporter.org/profiles/06000US3404180570-white-township-warren-county-nj/>. Accessed June 2021.
- ²⁴⁴ United States Department of the Treasury, Internal Revenue Service, Income Averaging for Farmers. https://www.irs.gov/publications/p225#en_US_2019_publink1000217859. Accessed June 2020.

²⁴⁵ United States Department of Agriculture, Farm Service Agency.
<https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/beginning-farmers-and-ranchers-loans/index>. Accessed June 2020.

²⁴⁶ United States Department of Agriculture, Service Center Locator.
<https://offices.sc.egov.usda.gov/locator/app?service=action/1/ServiceCenterSummary/4/agencyToOfficeLink>. Accessed June 2020.

²⁴⁷ United States Department of Agriculture, Farm Service Agency, Farm Loan Programs, Background. <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=landing>. Accessed June 2020.